CHILD ABUSE RISK FACTORS FOR SIBLINGS OF IDENTIFIED VICTIMS

BY

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Life presents each of us a different path to travel with various opportunities for turns and unique roads to explore, and this dissertation process has offered me a highway of personal and professional growth. Sometimes, it seemed a little dirt road, not well-marked, offering hidden potholes and slippery rocks. Still, at other times, many traveled with me, making the journey less scary and marking the path with their guidance. Though I often moved onto the exit ramp too quickly, thinking the journey less than bearable, I maintained my desire to achieve this goal to return to my community, myself, and my God some method of service by obtaining a professional degree. Despite the hardships and fear, this journey could never have found fulfillment without the love and support of many friends and guides.

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Abstract of Dissertation Presented to the Graduate School of the University of Florida in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

CHILD ABUSE RISK FACTORS FOR SIBLINGS OF IDENTIFIED VICTIMS

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The purpose of this study was to conduct an exploratory investigation of factors that describe and predict risk of abuse to siblings of an identified child abuse victim. This research study endeavored to explore original source documents regarding families experiencing physical and/or sexual child abuse. This research effort sought to ascertain factors present in the family which might provide mental health practitioners greater ability to assess risk of abuse to siblings of identified victims. Specifically, five main variables were assessed for their association and relationship to the increased risk of abuse to siblings: (a) absence of birth parent from the custodial environment, (b) presence of substance abuse or severe substance addiction by the non-offending caretaker and/or offender, (c) history of childhood abuse reported by the non-offending caretaker and/or

offender, (d) prior substantiated reports of abuse, and (e) presence of a stressful life experiences expressed as a problem in the relationship with the spouse/partner, involving arguing, separation, divorce, custody, or spouse abuse.

The sample population consisted of 200 families from 16 counties in north central Florida, referred for evaluation of child abuse from 1986-1995. All family documents chosen for analysis indicated a substantiated abuse experience. Case-Control sampling procedures were employed for the study. The Case and Control Series were matched by four age groups and gender. The 100 pairs of families received the same level of diagnostic assessment by the Child Protection Team established in the area to assist child abuse victims and their families.

Logistic regression procedures provided the basis of analysis. Descriptive data regarding family dynamics, type of child abuse experienced, and characteristics of the abuse situation were furnished. Substance abuse or addiction by the offender, severe substance addiction of the non-offending caretaker, history of abuse of non-offending caretaker and offender, prior substantiated reports of abuse, and problems in the parent dyad involving separation, divorce and spouse abuse were significantly associated with an increased risk of abuse. Recommendations for counseling interventions and further study of risk factors are included.

CHAPTER I
INTRODUCTION

This is the true nature of home--it is the place of Peace; the shelter, not only from all injury, but from all terror, doubt, and division. John Ruskin, Of Queens' Gardens, Section 68.

Almost six years old. Thoughts of swimming with friends, swinging to touch the sky, bike-riding to the park without mom or dad, digging into the earth to find where it ends, preparing to rush into first grade with the "big kids" to learn to read. These joys of having lived almost six years belong to every child, along with the serenity of loving arms and hands to offer comfort, nurturing words to encourage strength, and warm smiles to scare away the monsters. These belong to all children.

But not to Theresa. Almost six years old. Theresa (fictional names only are presented) is found in the back room of a neat, clean, orderly home of a young, single mother. The middle child in the family, Theresa presents to medical and mental health personnel in extremely poor condition. Her height and weight plot the curve of a three year old child. She is dirty. Her distended abdomen outwardly portends the inward experience of anemia from poor and inadequate nutrition. Theresa's forehead and nose are swollen from recent inflicted injury. New loop and belt marks rise from old loop- and belt-mark scars; layers upon layers of marks from repeated beatings, accompanied

by burns on her buttocks and human bite marks on her chest. Theresa walks out of childhood with a limp from a fractured hip left untreated; the result of inflicted trauma.

Theresa's siblings, an older brother and younger sister, are noticeably well-groomed, clean, well-fed. They evidence no indications of ever experiencing even a minor bruise from a too-rough spanking. The eldest child gave a detailed disclosure of the abuse experienced by his sister at the hands of his mother. Later, he would testify to this knowledge in criminal court against his mother.

Bernice is also almost six. The youngest of three children, Bernice lives with her mother and stepfather. Bernice comes to the attention of medical personnel because she has been violently sexually assaulted by her stepfather. The one-time incident requires surgery to repair damage to the vaginal area. While waiting for her younger sister to receive medical care, the middle child, a female age 13, reports experiences of sexual abuse by the stepfather spanning three years. These experiences followed a familiar pattern of progression from fondling to intercourse. Later that week, following the arrest of the stepfather, the eldest child, a male age 16, reports repeated incidents of sexual abuse by the stepfather over the past two years. He had never revealed the abuse to any family member or friend.

The research offered for consideration in this study proposes an exploration of families comprising sibling groups where only one child is a victim of abuse, as compared with multiple child victims within the family. The study examined several specific factors which may hold merit as predictors of increased risk of child abuse to siblings of identified victims. This study offered an important addition to the knowledge

and understanding of general risk factors involved in abuse experiences and specific factors associated with increased risk of abuse to siblings.

Overview of Child Abuse and Neglect

In 1974, The Child Abuse Prevention and Treatment Act became Public Law 102-295. According to Peterson and Urquiza (1993), this law defines child abuse and neglect:

> as the physical or mental injury, sexual abuse or exploitation, negligent treatment, or maltreatment of a child, a person under the age of 18 . . . by a person who is responsible for the child's welfare...under circumstances which indicate that the child's health or welfare is harmed or threatened thereby. (p. 17)

The Act established federal resources to support the States' duty and power to act on behalf of a child when parents are unable or unwilling to do so (DePanfilis & Salus, 1992). Legal definitions differ from state to state, but the federal mandate remains a clear directive regarding the perceived value of children to the country. The principle underlying the Act maintains that the community, in addition to the parent, has a strong interest in the care and nurturing of children. Children represent the future of the community. When children receive negligent and abusive behavior during their development, the community experiences the consequences for decades.

During 1993, approximately 3 million children were reported to have been abused and/or neglected to child protective service agencies in the United States (Edmonds, 1994; McCurdy & Daro, 1994; National Committee on the Prevention of Child Abuse, 1994). Nearly 45 out of every 1,000 children are reported as victims. Of those reported, 1,016,000 children were substantiated as victims of childhood maltreatment. The number of substantiated victims represents 15 out of every 1,000 children in the United States.

This number falls short of a more accurate assessment of the experience of childhood maltreatment in our country because states define acts of abuse differently, and some states fail to make any report to the national center responsible for collecting data.

Of confirmed cases of maltreatment, physical abuse accounts for 25% of the incidents; sexual abuse, 15%; neglect, 47%; emotional maltreatment, 4%; and other situations of abuse, such as abandonment, 9%. These percentages have remained fairly stable since 1986 for those states reporting (Edmonds, 1994). However, any increase in the number of child abuse reports could not be linked at this time to specific causal factors because of the lack of research. Newberger (1991) stated, "Questions about whether increases represent a rise in the incidence of maltreatment or merely a more accurate appraisal of the child maltreatment problem cannot be addressed" (p. 91).

In 1993, child fatalities from abuse and neglect accounted for 1,299 confirmed deaths. The rate of fatalities since 1985 has increased 50%. In an attempt to protect family members, or as a result of poor investigating techniques, children listed as dying from accidental causes may have suffered abuse or neglect directly responsible for their demise (Christoffel, 1990). McCurdy and Daro (1994) reported on child deaths resulting from abuse or neglect by stating, "These figures undercount the actual incidence of maltreatment fatalities in the United States" (p. 88). According to Edmonds (1994), child deaths in Florida as a result of abuse or neglect in 1992 numbered 67; in 1993, 63. Florida ranks third in number of child deaths associated with abuse or neglect in the nation.

Children in the state of Florida during 1991 constituted 22.3% of the total population, or 2,883,831 members of the population under the age of 18 (Florida Center for Children and Youth, 1993). Of cases investigated for 1991, Florida had 173,375 verified child maltreatment reports. Of these, 33% were for physical abuse, 44% for neglect, and 23% for threatened harm (e.g., inadequate food, shelter, supervision).

Effects of Child Abuse and Neglect

Whatever form it takes, the experience of childhood abuse, physical, emotional, or sexual, effects the developing personality. Counseling offices, mental health centers, self-help groups, psychiatric hospitals, prisons, and school guidance offices overflow with the wounded child and adult survivors, who testify by their pain to the effects of child abuse and neglect. "Childhood histories of emotional, physical, or sexual abuse or neglect and the subsequent development of maladaptive traits and behavior are at the root of many clients' presenting problems" (Peterson & Urquiza, 1993, p. 1).

Childhood maltreatment effects personality development, interpersonal relationships, school and job functioning (Armsworth & Holaday, 1993). The experience may lead to the development of chronic life adjustment problems, personality disorders, and psychopathology. Models of inadequate, abusive parenting may move down through several generations as victims internalize or adopt patterns of child care displayed by their victimizers.

In a 1992 report by the National Committee on Child Abuse and Neglect, researchers provided data from across the United States to show that maltreated children displayed the impact of their experience in some of the following ways: 70% had

academic performance difficulties, greater than 50% had sleep disturbances, 31% had evidenced drug abuse, 35% demonstrated extreme aggressive behaviors, and 23% engaged in self-destructive behaviors (National Center on Child Abuse and Neglect, 1993). The same document reported on the University of South Maine which studied 4,000 violent youthful offenders. The study found 59% of the violent youthful offenders experienced neglect and lack of supervision as children. These conclusions did not account for any experience of abuse.

Howing, Wodarski, Kurtz, and Gaudin (1993) concurred that effects displayed in childhood or adolescence are often seen in poor school performance and difficulty with peer relations. Maltreated children, they reported, display poor impulse control, lack of empathy, and noncompliance with reasonable authority. Their study revealed a high correlation between maltreatment and delinquent behavior. Adolescent pregnancy and school drop-outs often result, according to Faller (1990). Faller also reported that eating disorders, substance abuse, depression, and spouse/partner abuse added to the list of long-term effects experienced by children maltreated by their caregivers.

Financial Impact of Child Abuse and Neglect

Financially, the cost of child abuse and neglect is an overwhelming burden to the budget of communities and states across the nation. This fiscal expenditure robs children and adults of the experience of funding for more enjoyable social and environmental experiences. According to Radigan (1992), during the year 1991, Florida spent $4,650,913 on Prevention Services. Radigan further indicated that for child welfare services, Protective Investigations spent $45,470,034 on 119,316 investigations of child

maltreatment. This includes services for investigating all allegations of abuse, neglect, and abandonment, providing emergency services for the protection of children, and obtaining sufficient information to support department decisions for case disposition. Emergency shelter of children removed from the care of their parents involved $14,976,186. Substitute care, such as foster care, required $94,863,643 of the state's monies. The Intensive Crises Counseling Program needed $4,613,106 of the budget.

These figures do not represent money budgeted for community mental health centers, sexual abuse treatment programs, offender programs, and in-patient care dealing directly with the effects of child abuse and neglect. Nor do the figures represent the cost to the community in loss of life and service. Newberger (1991) stated, "Child abuse is costly in both human and fiscal terms, but neither the medical nor the psychological sequelae have been studied sufficiently well to allow a conclusive assessment of their costs" (p. 65). One example of a poor cost accounting for child abuse is a consideration that the 67 child fatalities attributed to abuse in Florida during 1992 accounted for over 5,200 years of potential life lost.

Certainly the cost of caring for and treating children and families encountering child maltreatment extracts a toll on the experience of all community members, financially as well as emotionally and socially. The quality of life for all community members is adversely effected by the incidence and cost of childhood abuse and neglect.

Mental Health Professionals Working With Child Abuse and Neglect

Nationally, mental health professionals discover an abundance of work related to the immediate results and long-term effects of child abuse and neglect. Peterson and

Urquiza (1993) reported the use of a new term within the profession coined to characterize this work, i.e., abuse-focused therapy. Mental health professionals are called to offer a variety of services to clients involved with abuse and neglect. Demands upon mental health professionals for parent training and education have increased dramatically from the judiciary and agencies dealing with reunification efforts. Mental health professionals may offer brief and long-term individual and family therapy in response to these demands. Crisis intervention needs are filled by mental health professionals, as well as consultation to the state's Department of Health and Rehabilitative Services (HRS) and its division of Children, Youth, and Families. Consultation and court testimony may be requested by law enforcement personnel. Offering home-based counseling programs and support for self-help groups also requires the efforts of mental health professionals.

The basic goals of this expenditure of professional skill, study, and work are to assist children and families to move beyond victim status, develop more successful caretaking techniques, and improve the experience of family and community life. Protecting children from harm and strengthening families so they can meet their children's developmental needs are other primary goals for mental health professionals. DePanfilis and Salus (1992) added that all relevant community mental health professionals, regardless of their designated agency, must be involved in the community's prevention and treatment efforts (Leonard & Jacob, 1988).

Therapeutic intervention into the lives of abused children and their families must be sensitive to the culture, values, and religion of the families served, while maintaining an awareness of the essential uniqueness of individuals involved. Counseling intervention

must consider the distinctive history, strengths, and resources of each family member. To aid and empower families experiencing abuse, mental health professionals need to believe that adults who maltreat their children have the capacity to change their abusive and neglectful behavior when given sufficient assistance, counsel, and resources. The mental health professional's response must be nonpunitive and conducted in the least intrusive manner possible, continually striving to protect children from future harm, and strengthening parents so they can provide a family environment conducive to the emotional and physical well-being of each member (DePanfilis & Salus, 1992).

To handle the demanding nature of abuse-focused therapy, it is essential for mental health professionals to know the definitions, dynamics, and effects of all forms of child abuse and neglect (Peterson & Urquiza, 1993; Doyle, 1990). Counselors need to understand how contextual and environmental dimensions of family life impact upon the experience of child abuse (Newberger, 1991). Abuse-focused therapy demands mental health professionals obtain specialized training regarding child abuse and neglect, so clinical intervention will effectively teach parents, and create avenues of growth and change for children and their families. To function within the field of abuse-focused therapy, clinicians will draw from theories of personality development, and theories regarding the cognitive, behavioral, and emotional functioning of children and adults. Knowledge of child development and the unfolding life span tasks of adults is essential.

Historically, abuse-focused therapy centered on treating the abuser, who was perceived as deviant. Treatment attempted to dig out the roots of a troubled personality, reshaping the individual to an increased level of social appropriateness. It was assumed

the abuser lacked the ability because of his or her deviance to act according to social norms for parenting. Left out of the therapeutic formula were the non-offending caretakers, siblings, and perhaps even the victimized child. Further, the central focus of this therapy was whether or not to separate a child from his or her parents. According to Newberger (1991), this "became the informing question of practice, and punishment may be meted out in the guise of help" (p. 53). Often mental health workers attended their intervention efforts extensively to work with the offending parent and abused child, ignoring extended family members, siblings, and partners (Cimmarusti, 1992). Still other mental health professionals employed a strict family therapy approach which minimized the role of counselors in protecting children from abuse.

In 1980, the United States Congress proffered a new philosophy of care to abuse victims and their families through federal legislation known as the Family Preservation Act (Chapman & Terry, 1984). Legislators attempted to broaden the perspective regarding mental health and social service intervention into the lives touched by child abuse. While protecting children from harm highlighted the field, maintaining family unity and integrity ascended as a primary goal. This approach emphasized the necessity of a multi-disciplinary team strategy to rebuilding child victims, siblings, offending and non-offending caretakers, and extended family members. This social policy aimed toward the improvement of individual, family, and community life.

Currently, mental health professionals continue to concentrate their efforts toward empowerment of the family unit, emphasizing a positive, collaborative approach to solving the problems which resulted in child abuse, rather than reshaping the individuals

involved. A child-centered perspective to protection and treatment does not negate a family-centered empowerment focus. Abuse-focused therapy must attend to the child's need for protection, but "efforts to protect a child must go hand in hand with the development of a program to help his or her family" (Newberger, 1991, p. 69). "Instead of viewing families as part of the problem mental health professionals are being challenged to focus on the strengths of families, and to join with them as partners in the helping process" (Knitzer, 1993, p. 9). Newberger (1991) addressed the need for a shift in attention by mental health professionals from individual weaknesses to family strengths, stating, "Practice should focus more on family strengths and on prevention rather than on perceived pathologies to be treated by health care professionals" (p. 56).

Therapeutic intervention in abuse-focused therapy carries a two-fold set of objectives. The first objective is to deal with the emotional, social, and relational effects of the abuse. Second, therapy must decrease the risk for future abuse (Faller, 1993). To accomplish these goals, mental health professionals may engage children and adults in a variety of therapeutic methods. Helfer and Kempe (1987) reported, "Treatment includes all attempts to modify the family unit's way of operating, whether those attempts derive from specialized professionals, from self-help support groups such as Parents Anonymous, as well as the management of the system itself" (p. 339). Individual and group therapy with children will allow the child to come to terms cognitively and emotionally with what has occurred in their family (Doyle, 1990). Individual and group therapy have been effective methods of engaging the offending and non-offending parents. There is a significant need for intensive family treatment (Leonard & Jacob, 1988).

Dealing with related counseling issues, such as substance abuse assessment and treatment, may offer assistance to the growth of the adults involved. Combinations of therapeutic efforts may benefit the family, such as, family therapy and group counseling for the victim, siblings, offender, and offender's partner (Newberger, 1991).

Collins and Collins (1994) suggested mental health professionals employ a variety of "non-therapy strategies" (p. 241). These might include parent support groups, respite care for parents, and collaborative case planning. Prevention efforts offered by mental health professionals may help reduce the occurrence of child maltreatment and are particularly needed with parents of young children (McCurdy & Daro, 1994; Helfer & Kempe, 1987). Prevention efforts offer supportive intervention in the homes of these families, meeting in local community centers for parent education, and establishing hospital- and school-based groups for high-risk parents. Helfer and Kempe (1987) indicate that treatment efforts span a wide array of services from work with an isolated single-parent family, to a large extended family network. It may require working with the biological family in parallel with a foster family. Individual and group therapy for adult survivors of abuse has grown as a specialized field of service for mental health professionals and may assist in preventing further abuse of children (Doyle, 1990).

Abuse-focused therapy has progressed to the use of child protection centers, where families can obtain all necessary services from the beginning of assessment to therapeutic closure occurring in one location. Services are provided from a multi-disciplinary perspective, as recommended by the Family Preservation Act. No one profession alone can prevent or treat the problem of child abuse and neglect. Clinicians must be familiar

with relevant agencies and their missions and protocols to enhance services and increase resources to these families (Chapman & Terry, 1984). All relevant community helping professionals, from school counselor, community mental health workers, psychiatrists, family and marriage therapists, and clergy, need to be involved in the identification, prevention, and treatment efforts (DePanfilis & Salus, 1992). Child abuse and neglect is a community concern.

Statement of the Problem

A report by the United States Office of Technology Assessment and the Children's Defense Fund (1994) found that "two thirds of children and adolescents who needed mental health services got either no services or inappropriate ones" (p. 8). The report defined this as a failure of the mental health profession to identify the treatment needs of children, particularly abused children. The report clarified their perception that those "most likely to be unserved or undeserved were adolescents, and abused or neglected children" (p. 8). Haraway (1993) suggested that despite the demand for services, mental health professionals fall short of meeting the need. From a cross-sectional national study of psychotherapists, Haraway found that 40% did not attempt to address family violence due to lack of confidence and knowledge for dealing with the issue. When attempted, 91% of the psychotherapists underplayed the seriousness of the violence currently experienced by the family. Subsequently, interventions recommended by these professionals were inappropriate and sometimes added to the conflict within families served.

Haraway (1993) stressed the need for better training of psychotherapists and counselors on the identification and intervention of family violence generally, and child abuse specifically. Curva and Taylor (1994) detected a lack of training and supervision in the dynamics of child abuse and neglect provided at institutions of higher education preparing mental health professionals. Peterson and Urquiza (1993) stated, "Child abuse intervention as a subspecialty in mental health could be strengthened if basic and advanced training were offered in undergraduate- and graduate-level courses" (p. 5).

According to Curva and Taylor (1994), the Florida House of Representatives Committee on Aging and Human Services is sponsoring research regarding the quality of care provided by mental health professionals in cases of child abuse and neglect. Curva and Taylor (1994) reported, "Concerns have been raised by members of the House of Representatives and other parties regarding the qualifications of mental health professional staff making recommendations to the courts" (p. 3). The study found the professionals ill-equipped to address with expertise even a basic understanding of child abuse and neglect issues.

Considering the difficulty mental health professionals have demonstrated meeting the needs of abused children and their families, this study attempted to advance the knowledge and understanding of two basic features associated with abuse-focused counseling. These two features are the significance of risk factors of abuse, and the potential for specific risk factors to suggest a risk of abuse to siblings of identified victims. The objective of this study is to explore risk factors useful in the prevention,

identification, and treatment of abuse to siblings of children identified as victims of parental maltreatment.

Current information and research regarding risk of abuse to siblings is seriously lacking, as will be discussed later in this chapter and in Chapter II. Such a deficit hinders professional ability to service this population of children and families. To provide efficient, supportive, and effective intervention to families experiencing abuse, mental health professionals must capably assess factors which place children at risk for future abuse. Assessment of risk factors alerts helping professionals to the likelihood of future abuse incidents and the success of treatment. Risk assessment measures are currently needed throughout the United States as tools in the prevention and treatment of child abuse and neglect. The ability to assess risk by identifying potential victims, and the type and course of treatment will greatly assist the mental health profession.

The focus of this research was the analysis of original source documents which detail the psychosocial and medical features of child abuse victims and their families. The documents contain information never collated or analyzed. The case histories examined were gathered through clinical interviews conducted with child victims and/or their caretakers. A comparison of families where siblings have been abused with families where only one child of a sibling group has been the victim of physical or sexual abuse was conducted. The study addressed four specific variables distinctly relevant to the dynamics of child abuse: (a) the presence of substance abuse by the child's caretakers, (b) the absence of one or more birth parents in the custodial environment, (c) a history of childhood physical or sexual abuse in the caretaking parents, and (d) prior confirmed

reports of abuse within the family. The research addressed the experience of physical and sexual abuse only.

Risk Assessment Measures

Attempting to deal more efficiently, compassionately, and comprehensively with child abuse and neglect necessitates an assessment of the degree of harm sustained by the victim, and the likelihood of future abuse. Risk assessments are often completed by mental health professionals, law enforcement personnel, judges, attorneys, and educators in an attempt to make decisions about children's needs for safety and the parents' ability to provide adequate standards of care. Professionals must evaluate the family structure contributing either to the child's welfare or continued abuse. Evaluation must determine treatable families, the potential for family reunification, or the necessity of allowing children quick and easy access to adoption processes.

Decisions regarding the risk assessment process begin with the first report of abuse and extend through the investigation, evaluation, and treatment of family members. To gain proficiency with this process, experts need increased ability to articulate and identify risk factors within families rendering children at greater or lesser potential for abuse and neglect.

Faller (1990) believed a serious impediment to professional decision-making regarding prevention of child abuse and intervention into the family through treatment efforts "is the lack of a planned and systematic strategy for assessing cases" (p. 150). Hegar, Zuravin, and Orme (1994) reported that a central challenge to mental health professionals at each step of the intervention process is to assess accurately risk of harm

to the children. They stated, "To help those who make decisions, risk assessment has become a major emphasis for staff training and agency policy" (p. 171). Risk assessment tools offer a critical adjunct to professional judgment.

Currently, the Child Welfare League of America, the American Public Welfare Association, and the American Humane Association all support philosophically and financially efforts to develop procedures and instruments for risk assessment. However, the tools prevailing in professional use offer inadequate assistance (DePanfilis & Salus, 1992; Faller, 1990). Faller found many states moving ahead with efforts to develop risk assessment measures as "child protection experts and others are greatly concerned about which family situations render children in danger of maltreatment" (p. 146). According to DePanfilis and Salus (1992), assessing risk of abuse and neglect "to the child enables community professionals to identify correctly strategies to prevent maltreatment in the future" (p. 37).

Numerous factors have been offered as contributory to the experience of child abuse and neglect. Though many risk factors exist, Egeland (1989) emphasized the need for counselors to be familiar with them, "including the families' life circumstances and stressors, and a range of parental characteristics and caretaking skills. For purposes of early identification and prediction, a combination of risk factors must be considered" (p. 9). A lower level of economic resources is frequently cited as a strong risk factor for abuse and neglect (Faller, 1990; Egeland, 1989). Youthfulness of the parent often seems to create a situation of greater risk (Caliso & Milner, 1994). The mean age of physically abusing parents is estimated to be 20 years, with a range of 13-32 years for the majority

of offenders. Faller (1993) and Finkelhor (1993) point to factors such as sexual dysfunction in the marital relationship, social isolation, and unsupervised access to children as risk factors of abuse, particularly sexual abuse. Some researchers focus on personality characteristics of the offending and non-offending parent, or the child victim. Finkelhor (1984) discussed depression of abusive parents as functional for increased risk of sexual abuse. Children with special medical or intellectual needs, those born prematurely, or children with physical handicaps may be at increased risk of abuse (Milner & Chilamkurti, 1991; Finkelhor, Hotaling, & Yelo, 1988) Parental personality characteristics have been discussed, particularly a low level of intellectual functioning, antisocial or narcissistic personality disorders, or diminished level of physiological health. Research has not verified the role of many of these factors in the etiology of child abuse and the validity of their influence remains primarily clinically intuited.

Several factors have risen as potentially more potent indicators of abuse than others. Intergenerational transmission of abuse has been discussed for decades as a prime factor increasing risk of abuse. MacEwen (1994) reported on the hypothesis that an experience of child abuse and neglect would lead to a greater risk of abusing children in the adult's experience as a parent. Although counselors and psychotherapists accept this hypotheses, its significance is not yet based on research and accumulated data analysis. MacEwen (1994) stated, "The recent research using improved methodologies has been far less supportive of the intergenerational transmission of family aggression than were the earlier studies" (p. 351). Other researchers respond to the debate more strongly

supporting the hypotheses (Ayoub, Willett, & Robinson, 1992; McCormack, Rokous, Hazelwood, & Burgess, 1992).

Substance abuse involving alcohol, cocaine, crack, and the opiates also has experienced a heightened interest from researchers as a significant risk factor for abuse. Famularo, Stone, Barnum, and Wharton (1986) conducted a study of alcoholism among families whose children were removed by court order because of maltreatment. Their work indicated a significant relationship between alcoholism and physical abuse, sexual abuse, and neglect. Hutchison (1989) and Reich, Earls, and Powell (1988) found in their research globally diminished ability of parents to handle the caretaking role when substance abuse was present. Specifically, both studies reported increased child abuse and neglect resulting from substance abuse within these families. Research studies, however, appear limited in number regarding the correlation of child abuse and substance abuse (McCurdy & Daro, 1994).

Whether a child is raised in a family with both biological parents, or in a single-parent home, or blended family seems predictive of abuse. The absence of one birth parent may indicate a child's caretakers are a single birth parent, or a birth parent with a live-in partner or new spouse. The absence of a birth parent may result in a family constellation of child and adoptive parents, or child and foster parents. Whatever configuration the family presents, the absence of one or both birth parents seems to increase the risk of child abuse and neglect (DePanfilis & Salus, 1992). Finkelhor (1987) found this particularly congruent with sexual abuse perpetrated by stepfathers or live-in boyfriends, stating, "Having a stepfather was one of the strongest risk factors" (p. 25).

Finkelhor (1993) continued research and study of this factor finding the presence in the household of a biological mother and father as a factor decreasing risk of sexual abuse. Regarding physical abuse, Rosenthal (1988) reported that for most age groups, stepfathers and male non-relatives in contrast with fathers and male relatives were more likely to inflict serious physical injury. Stepmothers when compared with biological mothers inflicted significantly more serious physical injuries (Hegar, Zuravin, & Orme, 1994). The relationship of the absence of one or both birth parents to child abuse has been studied only rarely, though finds much intuitive validation from mental health professionals (Hegar et al., 1994).

In determining the likelihood a family will respond successfully to counseling and mental health treatment, the number of prior referrals for abuse and neglect attributed to the family is often given significant weight as a factor useful for predicting future abuse (Helfer & Kempe, 1987). An increased number of prior referrals suggests to the therapists and judiciary a pattern of abusive behavior which has proven untreatable and a factor suggesting increased risk of abuse. Many risk factor measures or matrices currently in use emphasize the number of prior referrals as an indication of the families' unwillingness or inability to make changes in their style of interaction and problem-solving. While severity and frequency of past maltreatment is considered a risk factor for future abuse, few research studies addressed this topic (DePanfilis & Scannapieco, 1994).

Siblings of Child Victims

While the availability of comprehensive risk assessment tools lags behind the need within the professional community in general, knowledge and understanding regarding the risk specifically to siblings of identified victims falls even further short of the mark. As with Bernice from the introduction, siblings may be abused concurrently with the identified victim, though their abuse remains unidentified. Like Theresa, certain familial, parental, and child-oriented factors may yield a situation where an identified victim may be the only target for abusive treatment. Siblings may presently become the targeted victim after removing the originally identified child.

Much knowledge and concern regarding siblings comes from clinicians, whose primary focus is treating intrafamilial abuse. According to Finkelhor (1993), minimal epidemiological data or research exists suggesting specific factors useful in assessing risk to siblings of identified victims. Case studies supply anecdotal evidence of multiple victims in one family, but little systematic data are available to guide practice and professional decision-making. Finkelhor (1993) stated, "There is a widespread clinical observation, taken for granted in much child welfare activity, that siblings of abuse victims are themselves at higher risk for abuse. No one has clearly supported this with epidemiological data, however" (p. 69). As risk factors to siblings remain unclarified and based primarily on assumptions, mental health professionals fail to have a more informed base of knowledge from which to offer assistance to children, their families, and their communities.

Theoretical Framework

Whether the work with child abuse victims and their families places a professional in the early stages of investigation and crisis management, or as a helper during the later stages of reunification and rebuilding, the effort can weary the most optimistic and stout-hearted. To enter the world of confusion, misery and sadness enveloping adults and children suffering the consequences of abuse requires an overarching sense of purpose and mission. Within the history of abuse-focused services, a variety of therapeutic models have arisen to explain etiology and detail treatment issues. Initially, psychiatric models of abuse developed a symptom-oriented perspective (Milner & Chilamkurti, 1991). The goal of the psychiatric model is to determine the psychopathological roots driving parents to abuse their children. The model leans toward the provision of lengthy therapeutic treatment to eradicate the aberrant condition.

Congruent with this model is a neurobiological perspective, which relies on the assessment of impaired intellectual functioning, neurological deficits within the child or adult, or physical disabilities which might explain or contribute to abusive behavior. Newberger (1991) found that much current training of professionals derives its curriculum from this bio-medical, symptom-oriented approach, which discounts a broader ecosystemic perspective.

The Perpetrator-Victim Model followed from a symptom-oriented perspective. This model has dominated much of the past two decades of social policy regarding child abuse and neglect (Trepper & Barrett, 1989). The Perpetrator-Victim Model is a linear paradigm theorizing that child abuse and neglect presents as an aggressive act of a

pathological or deviant adult, perpetrated upon an innocent and uninvolved victim. The Perpetrator-Victim Model results in a heavy emphasis on the use of law enforcement, punishment, and incarceration. Victims are viewed as needing greater state and social rescuing. The result for children is their removal from family members, as evidenced by an overuse of the foster care system (Collins & Collins, 1994). Psychological treatment and counseling based on this model rely primarily on individual counseling for the child/victim, non-offending parent, and abuser/perpetrator.

Other theorists attempted to broaden the limiting focus of the Perpetrator-Victim Model (e.g., Milner & Chilamkurti, 1991). Assessing socialization factors, such as demographics of the family environment, or situational and cultural life stressors added components which encouraged the use of more community resources and lessened the pattern of blaming and rescuing. Understanding the cognitive and affective components involved with child abuse addresses integral issues, such as parental self-esteem, locus of control, and attribution of meaning to children's behavior. Developmental counseling and parent education have assisted many families as an outgrowth of models incorporating these elements.

The Family Systems Model perceives child abuse as "the product of a problematic family system rather than as the cause" (Trepper & Barrett, 1989, p. 18). Theory underlying the Family Systems Model purports that all family members share in the cause and maintenance of abuse. All family members, therefore, are both perpetrators and victims of the abuse. Counseling efforts suggested by the Family Systems Model are directed at improving communication styles among all members, restructuring impaired

relationship boundaries, and relearning patterns and habits of relating passed from generation to generation.

While some truth exists in assumptions underlying all of these models, Trepper and Barrett (1989) recommended a compromise position which attempted to integrate the more salient features of several of the previous models. The Multiple Systems Model acknowledges that many systems within the environment impact individuals with regard to abusive behavior. The Multiple Systems Model advocates an understanding of the interaction among various external, familial, and intrapsychic systems. They stated, "The underlying theme of this model is that the therapist must not treat just one system (such as the offender only), but instead must intervene upon all systems which contribute to the abuse" (p. 20).

The framework of the Multiple Systems Model is a diathesis-stress design, i.e., the existence within every family system of vulnerable areas of weakness. During episodes of stress, these vulnerabilities may be exposed and expressed in the form of child abuse. All families are endowed with a degree of vulnerability based upon clusters of factors which may be demonstrated as abuse if a precipitating stressful event occurs and the family's coping skills prove inadequate to handle the experience.

The Multiple Systems Model postulates four major vulnerability factors: (a) socioenvironmental, (b) family-of-origin, (c) individual psychological, and (d) family systems. Deficient points of stress within one or more of these four vulnerability factors, given a particular life change or crisis, can result in child abuse. When mental health professionals adopt this perspective, they assess risk within each of these factors. The

professional will seek to find areas of general vulnerability in the total system of the family's experience, appraising all life events generating stress. If the vulnerability factors receive attention and remediation, and life events generating stress are alleviated, the potential for future incidents of child abuse are lessened.

Authors focusing attention on child abuse confirm the impact of stressful life experiences which exacerbate vulnerability factors resulting in abusive incidents. Burrell, Thompson, and Sexton (1994) asserted, "Stress is the most noteworthy correlate of child abuse potential" (p. 1046). The stress may occur within the parent, child, family, or extended family and community. It may be related to a parent's ability to effectively cope with stress when faced with deficient resources. Stressful life issues experienced by abusing parents were found highly correlated to family-of-origin vulnerability according to Egeland, Jacobvitz, and Stroufe (1988). Chance and unpredictable life events, such as, accidental death of a family member, may increase stress and the ability to handle the demands of the situation (Roberts, 1989). Stressful life experiences, including personal illness, addition of a family member, unemployment, or financial problems, when intertwined with specific areas of vulnerability may be expressed as child abuse (Goldman & Gargiulo, 1990).

The Multiple Systems Model reduces a reliance on the Perpetrator-Victim Model and symptom-oriented approaches. Use of an integrated framework, such as the Multiple Systems Model, offers diagnostic intervention strategies which increase the likelihood of maintaining family unity, protecting children, and alleviating vulnerability for future abuse (Newberger, 1991). The National Center on Child Abuse and Neglect (1992)

believes that children are at risk for maltreatment as a result of the pattern of interaction between themselves, their families, and their environments. The Center reported, "Child maltreatment occurs as a result of multiple forces that impact the family, interact and reinforce each other, and eventually result in child abuse and neglect" (p. 11).

The Multiple Systems Model is pragmatic in its approach and methods of intervention. The Model has functioned successfully as the basis for a treatment program begun at Purdue University in 1981 for sexual abuse victims and their families. Trepper and Barrett (1986) expanded their work from the university setting to private practice in the Chicago and the surrounding region. Since that time, the Multiple Systems Model has expanded to form the theoretical basis of other therapeutic programs around the United States for families experiencing physical and sexual abuse. Several models espousing an assessment of multiple factors contributing to the development and maintenance of family abuse appear similar to the Multiple Systems Model, but lack the particular component of vulnerability under stress, or diathesis-stress model.

Need For the Study

The people of the state of Florida have increasingly voiced dissatisfaction with the methods employed by investigators and child welfare experts during the past decade (Department of Health and Rehabilitative Services, Strategic Plan, 1993). As stated in the Strategic Plan (1993), people generally perceive the State's Department of Health and Rehabilitative Services (HRS), which is responsible for handling investigations of child abuse and neglect, as overly punitive toward parents and family members accused of abuse. The state is blamed for placing children into foster care too quickly and with poor

assessment of the family's strengths and capabilities. Few services have been offered to help families remain together while treating problems and developing greater ability to function without abuse. Children have been left for excessively long periods of time with little hope of reuniting with their family, or of finding support and nurturance through adoption processes when necessary. A child can remain in a temporary situation for years before a more stable condition is found.

During Florida's 1994 legislative session, the Family Preservation Act was endorsed. The Act embraces a new direction for child protection with an emphasis on improved quality of family life and family preservation. The legislators asserted their "new" value for Florida's family and children by indicating, "Every Florida child shall have a permanent family to support and nurture his or her growth and development and be free from abuse and neglect" (Florida Legislature, Chapter 415.5016, 1994, p. 1). Child abuse is to be assessed from an integrated, non-punitive perspective, with a goal of offering family-centered supportive services, according to the Act. Growing up in their family is optimal for children, as long as children's safety can be assured (DePanfilis & Salus, 1992). The goal is to strengthen families to raise healthy children, to empower families to meet the needs of their children, and to resolve the problems that led to maltreatment. Removing a child from the family is a measure of last resort, used only to ensure a child's safety.

The legislators conceived this direction as incorporating early risk assessment processes to identify the needs of children and families. As recommended by the legislators, risk assessment is to be conducted in a manner that evidences sensitivity to

the social, economic, and cultural environment of the family. The goal of child protection is to be addressed by risk assessment. When necessary, children may be removed to an environment least intrusive to the value of family life. Further, risk assessment should emphasize the family's strengths and positive capabilities to meet the child's needs. The legislators stated, "Child protection logically hinges on a family's strength and the availability of resources within the family's community to build on these strengths" (p. 16).

Using the resources within the family's community is endorsed by Collins and Collins (1994), who approved the Multiple Systems Model and Florida's new direction in response to child abuse. Collins and Collins (1994) found the greatest hope for dealing with child abuse rests in an emphasis on meeting an array of family needs rather than an individualized focus; on the use of resources, expertise, and support provided by family members and informal networks of churches, neighbors, and friends. This change in policy de-emphasized formal agency intervention which attempted to change individual parents or children. The Multiple Systems Model emphasizes strengthening of relationships and interactions between family members and formal and informal supports within the community. The Model in theory and as evidenced in a change in social policy is not a paradigm of psychopathological problems within the individual, but an ecological orientation encompassing family, friends, and community associations of a supportive and positive nature.

The current study was designed to address the need identified by Florida's social policy for greater use of risk factors of abuse, providing increased opportunity for early

assessment of vulnerabilities within families and areas for supportive intervention by mental health professionals. Concentrating on the interaction of specific risk factors de-emphasizes a reliance on individual psychopathology and victimization which had resulted in punitive and intrusive measures harming children and families. The study provided an exploration of the siblings of abuse victims, thereby asserting the value of a more holistic understanding of family life by mental health professionals.

By gaining greater knowledge of risk associated with parental substance abuse, absence of a birth parent, intergenerational transmission of abuse, and patterns of abuse experiences, mental health professionals can better offer children and families treatment opportunities congruent with a goal of improving family life. Case planning and treatment goals can be more thoughtfully delineated with knowledge about specific areas of vulnerability. Professionals may more readily assess a family's need for community resources to foster problem-solving.

The perspective of the Multiple Systems Model integrates assessment of risk factors with the impact of stressful life experiences. Attention to this component was addressed by the study and further advances the knowledge of how mental health professionals might create and implement prevention projects for high-risk families. The information gathered from the study will enable training of mental health professionals on ways to strengthen family life, particularly allowing families to remain together, though not ignoring the necessity of preserving child safety.

Purpose of the Study

To advance the knowledge and expertise of mental health professionals working within the field of child abuse, this study examined the relationships among factors associated with an increased risk for child abuse. More specifically, the study attempted to identify factors useful in predicting risk of abuse to siblings of identified child abuse victims. This exploration and analysis of risk factors was undertaken from a theoretical perspective of the Multiple Systems Model for the prevention and treatment of child abuse and neglect.

This research project was designed to study whether risk of physical or sexual abuse to siblings of identified child victims would correlate with four particular factors: (a) absence of one or more birth parents from the child's custodial environment, (b) presence of substance abuse by either the offending or non-offending caretaker, (c) history of abuse in the offending or non-offending caretaker, and (d) prior substantiated or confirmed reports of abuse. Applying the Multiple Systems Model, this study further attempted to ascertain whether stressful life experiences, particularly relationship difficulties within the parental unit in concert with one or more of the four risk factors had any impact on the abuse of siblings.

Research Questions

Little empirical evidence is available to describe risk factors which might predict maltreatment to siblings of identified child abuse victims. In this study, the researcher sought to contribute to the body of knowledge regarding abuse risk factors to siblings and explore the theory espoused by the Multiple Systems Model to understand and explain the

potential for abuse when general areas of vulnerability exist. To this end, the following research questions were posed:

1. What is the risk of child abuse to siblings of identified victims when one or both of the birth parents are absent from the custodial environment?
2. How does risk of abuse to siblings compare to sibling groups with only one identified victim when the caretaker demonstrates substance abuse or addiction?
3. How does a history of child abuse in the offending or non-offending caretaker effect the risk of abuse to siblings?
4. What is the risk of abuse to siblings when a pattern of abuse has been established through prior confirmed abuse reports?
5. How is the experience of a stressful life event as demonstrated by problems in the relationship between the parents associated with the risk of abuse to siblings?
6. What interaction exists between the experience of the non-offending caretaker supporting the child/victim emotionally and cognitively following a substantiated abuse report and the five risk factors stated in the above questions?
7. What interaction exists between the experience of the offender using force or threats to coerce secrecy about or compliance with the abuse and the five risk factors stated in the above questions?

Definition of Terms

Abuse The non-accidental infliction of physical or psychological injury to a child (a person under age 18).

Abuse Report The initial report of an allegation of abuse or neglect. In Florida, this report is always made to the Florida Abuse Hotline. The report alleges maltreatment of a child by a person responsible for the child's care. An abuse report always requires the commencement of an investigation.

Clinical Evaluation/Assessment A process to assess or evaluate the nature and extent of the family's presenting problem(s), the parents' and child's current level of psychosocial functioning, capabilities for improved level of functioning, and willingness and motivation to participate in treatment. The clinician assesses five basic areas regarding the caretaker(s) and child/children: (a) emotional and social strengths and weaknesses; (b) level of stress and coping mechanisms; (c) self-perceptions; (d) availability of supportive resources and capability to use resources; (e) need for medical or psychiatric evaluation.

Confirmed Report A report in which a preponderance of the evidence results in a determination that the specific injury or harm was the result of abuse or neglect, and that the perpetrator is identified. This may also be referred to as a Verified or Substantiated Report.

Emotional Abuse An interactive process of the effects upon the child's behavior and mental status by the specific acts and behaviors committed or omitted by the adult caregiver. Dynamics include a cumulative effect of repeated occurrences rather than a single incident. Emotional maltreatment occurs when the caregiver attempts to shape the child's behavior through the use of severe disparagement, humiliation, rejection, guilt, and fear.

Family Reunification The philosophical belief of social service agencies that children and families should remain together if the safety of the children can be ensured.

Identified Victim A child reported and confirmed for physical, sexual, and/or emotional abuse by the caregiver.

Mental Health Professionals Personnel trained and educated within the professions of psychology, social work, counselor education, marriage and family counseling, mental health counseling, school counseling.

Neglect Characterized by an act of omission such as adult withdrawal, indifference, and the nonrecognition of the child's physical, intellectual, or emotional needs. Neglect can be chronic, periodic, or episodic. Behaviors may include abandonment; inadequate physical supervision; refusal to seek, allow, or provide medical treatment; poor nutrition; disregard of health hazards in the home; inadequate or inappropriate clothing.

Physical Abuse Includes violent assault with an instrument such as a knife or strap, or other physically aggressive actions by the caretaker, such as slapping, hitting, punching, shaking, scalding, that lead to possible injury or harm of the child. The result of the adult's actions may be significant bruising, burns, fractures, ruptured organs, or death of the child. Physical Abuse is an active, participatory relationship between an adult caregiver and child victim, involving an act of commission.

Psychotherapy A method of treatment designed to produce a response by mental rather than physical stimulus. It includes the use of suggestion, persuasion, re-education, reassurance, and support. It may include hypnosis and psychoanalysis, family and couples therapy, and may be provided to an individual or group.

Risk Assessment An assessment and measurement of the likelihood that a child will be maltreated in the future, usually through the use of checklists, matrices, or scales.

Risk Factors Behaviors and conditions present in the child, parent, and/or family environment that will likely contribute to the future occurrence of child maltreatment.

Sexual Abuse Involves a sexual act imposed on a child who lacks emotional, maturational, and cognitive development to understand or comprehend the encounter. It is the exploitation of a child for sexual gratification of an adult.

Sibling A child related to the identified victim. The relationship may be as part of the birth or step-family, i.e., a sibling shares at least one parent in common with the identified victim. The relationship may also be the result of a connection externally established, such as, foster siblings, adoptive siblings.

Substantiated Report Same as confirmed report.

Treatment The stage of the child protection process whereby specific treatment services geared to the reduction of risk of maltreatment are provided by mental health professionals.

Unconfirmed Report The investigation of an abuse report determines that no indication of abuse or neglect exists.

Unsubstantiated Report The investigation of an abuse report determines that abuse or neglect likely did not occur. Several factors may account for the failure to substantiate a report. Abuse may not have occurred as alleged, though symptoms were suggestive of abuse. Insufficient evidence exists to indicate a perpetrator or specific act. The

allegation may have been made fallaciously by opposing parents and/or family members embroiled in custody battles.

Limitations of the Study

This study of siblings of child abuse victims was designed to explore and examine risk factors predictive of abuse. Research into the etiology, effects, and prevention of child maltreatment offers sensitive research issues laden with methodological and social concerns (Kinard, 1994). Analyzing original case data on families where abuse has been determined limits generalizability of results, as self-reports provided by the victims and families may not offer an objective assessment of past events. Also, the study does not deal with families experiencing similar factors who do not abuse their children (Haugaard & Emery, 1989). Families not experiencing abuse were not included in this study, which limits comparison of the findings to the majority of family life experiences. Generating recommendations for parenting techniques and improving family interactions are therefore limited (NCCAN, 1992).

Addressing abuse issues relies almost exclusively on the study of populations drawn from clinical or institutional settings (Newberger, 1991). The selective nature of case assignment for research purposes restricts a broader understanding of the epidemiological factors involved with abuse. With few exceptions, subjects have little choice regarding their participation in the medical examinations and psychosocial assessments necessary for a confirmation of abuse and treatment planning. The likelihood of gaining candid and comprehensive assessments of family life is marred by the

disgruntled and often court-ordered participation of angry and fearful parents and children.

Further, this study relied on definitions of abuse and standards for substantiating allegations which may not coincide with definitions accepted and practiced by other agencies or states. Operational definitions of maltreatment differ significantly across the nation (Kinard, 1994). All forms and experiences of abuse are not equal in duration and intensity. A child may experience more than one form of maltreatment in a given abuse incident, or different forms of maltreatment (physical, sexual, or emotional abuse) at various times in the family's life cycle. This study excluded experiences of neglect and emotional abuse. Vachss (1994) argued that emotional maltreatment is a component of all other forms of abuse and not to study its impact lessens the utility of results. Duration of maltreatment varies. Some children live in a continually abusive environment, while some may experience one incident of brief duration (Kinard, 1994). Although this study attempted to collect data regarding duration through prior confirmed referrals, it is limited by excluding a more detailed analysis of duration and intensity of abuse.

CHAPTER II
RELATED LITERATURE

When anything becomes more important to a society than the welfare of its children, it is a sure sign of spiritual disintegration.

Sam Keen, from Fire In the Belly, 1991

The Story of Mary Ellen represents the beginning of America's concern for the welfare of children through legal mechanisms and social polices of child welfare. In 1874, Mary Ellen became the concern of neighbors in her apartment dwelling. Neighbors heard her cries and whimpers, which resulted from mistreatment by her parents. Unable to gain access to the family to investigate Mary Ellen's condition and plight because of the parents' claim of right-to-privacy, Henry Burg, founder and president of the Society for the Prevention of Cruelty to Animals brought the case of Mary Ellen before the New York City courts. The parents had severely beaten and neglected Mary Ellen. The Court exercised protective supervision over Mary Ellen as a member of the animal kingdom and therefore entitled her to legal protection. In 1875, the first Society for the Prevention of Cruelty to Children was formed in the United States by Henry Burg and other child advocates. Thus began a battle to protect children, who had no legal rights or status in the judicial system, while conserving the right of parents and family to privacy (DePanfilis & Salus, 1992).

Child abuse has a long and tragic history, and children have been abused for centuries (Goldman & Gargiulo, 1990). One of the earliest recorded descriptions of child

abuse occurred more than 5,000 years ago in ancient Sumer where a clay tablet tells of a young girl who was sexually abused and boys who were whipped at school for the slightest provocation. Religious beliefs and practices frequently contributed to the maltreatment of children. Greek mythology records the frequent exploitation of children in sexually deviant rituals. "Throughout history, up to and including present day society, adults have assumed that they had the right to treat children in any way they desired" (Goldman & Gargiulo, 1990, p. 11). This pattern of ownership over the bodies and lives of children has occurred through all societies, economic levels, and religious affiliations.

In 1900, Illinois established the first separate court for children, hearing cases of abuse and neglect, and formulating acceptable standards for the humane treatment of children. Attention was later drawn to the problem in 1962 by Professor C. Henry Kempe, who proposed a constellation of adult behaviors and consequences to the child known as "The Battered Child Syndrome." This work stimulated the drafting of the Children's Bureau of the American Humane Society, which has become the lead agency for child welfare in the federal government (Newberger, 1991).

The first national survey attempting to gauge the incidence of child abuse was reported in 1970. This survey estimated approximately 6,000 children as abuse victims in the United States in 1967. In 1993, the incidence of substantiated cases had risen to over one million victims, though "researchers believe that there is a significant problem of underreporting" (Goldman & Gargiulo, 1990, p. 13). Parents may fail to seek medical attention for their injured or battered child, or the caregivers will use different physicians or hospitals when seeking medical attention for fear of being detected. Further, some

types of injures are difficult to detect. Those cases reported to agencies "are but a small portion of actually occurring cases and are biased in ways that have to do with prejudices and processes of the agencies involved" (Finkelhor, Hotaling, & Yelo, 1988, p. 30). Hegar, Zuravin, and Orme (1994) reported that between 1976 and 1988, child abuse reports more than tripled. Some escalation is due to increased public awareness and broadened reporting laws; however, the rates of child maltreatment also seem to be increasing.

Estimating the occurrence of child abuse is greatly hampered by lack of consistency in definition of abuse incidents and the variety of definitions established by communities. Individual states determine definitions of maltreatment, investigative procedures, and the structure of systems to provide services to children and families. Although the federal government is in the process of developing a voluntary reporting system, states are not required to report information about the incidence and frequency of child maltreatment to any federal agency. The criminal justice system collects some data, though excludes large amounts of family violence. "Consequently, limited information is readily available on the scope of the child abuse problem and the availability of resources nationwide" (McCurdy & Daro, 1994, p. 75). The Center for Disease Control has explored the possibility of trying to establish a systematic data collection system for domestic violence, though such attempts are unable to gain cooperation of the states to systematize national statistics (Finkelhor, Hotaling, & Yelo, 1988).

According to the National Center on Child Abuse and Neglect (NCCAN), in most states parents have the right to use physical force on their children as a form of discipline or punishment; however, this right is limited to reasonable force. "When determining whether a punishment is reasonable, a judge will look at the conduct being punished, the child's age, the injury caused, and other relevant factors" (NCCAN, 1993, p. 29). The legitimate rights of parents must be respected, but "laws against child abuse are an implicit recognition that family privacy must give way to the need to protect helpless children" (Center for the Future of Children, 1994, p. 136). Stein and Lewis (1992) addressed this conundrum of parental rights and the need to protect children, suggesting that though physical discipline may appear harsh at times, conservative definitions of abuse can distinguish between physical brutality and culturally condoned physical punishment. The taboo against sexual abuse in the United States is strong and no professional literature offered a defense of sexual behavior between children and their adult caretakers. Regarding sexual abuse, Sgroi, Blick, and Porter (1988) stated, "It is vital to the discussion to remember that the child is always victimized, as the child lacks the necessary emotional, physiological, and cognitive development to assimilate premature introduction to sexuality" (p. 53).

Though definitions cannot find universal consistency, mental health professionals, sociologists, and the general populace agree that the effects of child abuse are costly in human and fiscal terms. Newberger (1991) stated, "The physical and psychological implications for child and adult development appear to be grave" (p. 51). Perez and Widom (1994) added that "the persistence of the effects of childhood victimization on

intellectual and academic outcomes extends into adulthood" (p. 627). These effects are postulated as representing many of the presenting problems seen by school counselors, corrections workers, and other mental health professionals. Little data exists on how the mental health profession serves the needs of child abuse victims and their families and "whether more good than ill results from their involvement" (Center for the Future of Children, 1994, p. 230). Child abuse issues generally have found slight attention in the mental health professional research efforts. For example, a search of all dissertations completed at the University of Florida from 1990 through 1994 revealed only two which addressed the topic of child abuse.

The study under consideration in this research attempts to advance the knowledge of mental health professionals regarding child abuse by addressing the risk of child abuse to siblings of identified victims. Chapter II will review literature pertinent to a study of factors related to risk of physical and sexual abuse to siblings. The study compared families with only one identified child victim from among a sibling group with families where multiple victims were found among a sibling group. In Chapter II, the following topics will be discussed: (a) the Multiple Systems Model as a theoretical framework for the study, (b) the interaction of stressful life experiences with child abuse incidents, (c) the concept of risk factors pertinent to child abuse, (d) intergenerational transmission of abuse, (e) how a pattern of child abuse incidents within a family influences current abuse, (f) the relationship of substance abuse and the experience of child abuse, (g) the association of child abuse with the absence of a birth parent as a primary caretaker, and

(h) literature associated with research on siblings as child abuse victims. Literature support for the proposed methodology will receive attention.

Theoretical Framework

Mental health professionals are called upon often to intervene in the lives of families touched by child abuse. Individual therapy for the offending caretaker, non-offending parent, and child victim are the most frequently occurring treatment modalities. Family and group therapy, along with home-based counseling services have gained increased utility as methods of enabling parents to learn new parenting techniques. The profession lacks an integrated theory regarding child abuse and needs to gain a more comprehensive framework for dealing with abuse-focused therapy (Howing, Wodarski, Kurtz, & Gaudin, 1993).

Models advanced by mental health professionals as the basis of therapeutic intervention have moved in a path from individualized treatment programs to a greater emphasis on an integrated approach which incorporates a broader, ecosystemic perspective (Collins & Collins, 1994; Faller, 1993; Milner & Chilamkurti, 1991). "Initial efforts to understand child abuse focused on the psychological problems of the parents of the victims" (Newberger, 1991, p. 62). This led to a reliance on psychoanalytic approaches, which posited that unconscious parental drives and conflicts determined abusive behavior. Lewis (1989) reported, "Authors who promote the psychopathological model claim that social variables do not enter into the causal scheme of child abuse" (p. 19).

Finkelhor (1986) viewed this victim-perpetrator model as a simple method which allows us to keep psychological distance from abusive behavior. If only "sick" or deviant people abuse children, the chance of us "normal" people becoming abusers is far less possible. Garbarino (1977) criticized the pervasive reliance on a medical/psychiatric model, preferring a perspective that child abuse occurs as a point on a continuum of caregiver-child relations. Garbarino (1977) stated, "The maltreatment of children is the product of a multiplicity of factors, not of one influence acting alone" (p. 722). Pointing to vulnerability factors which may create conditions sufficient for child abuse to occur, Garbarino added, "Almost no one is immune to the role of child abuser if the discrepancy between situational demands is great enough" (p. 723). Roberts (1989) found the "potential for child abuse exists within us all given a sufficient number of stressful circumstances" (p. 46). According to Newberger's (1991) review of research literature, "psychopathology is not more prevalent in families where abuse is documented than in the general population, but the focus of clinical work remains primarily psychotherapeutic; and talking to an individual parent with a view to changing the parent's behavior remains the paradigm of clinical practice" (p. 51). Although mental health professionals receive a legal mandate to offer services to protect the children and help their families, the perpetrator-victim model inhibits the range of perceived diagnostic and therapeutic possibilities.

Newberger (1991) called upon mental health professionals to understand child abuse from an "ecological framework that includes interacting elements" (p. 56). Goldman and Gargiulo (1990) concurred, stating, "there is no single event or behavior

that produces an abusive individual. Rather, abusive parents/caregivers are products of a complex interaction of personal psychological factors and particular environmental conditions" (p. 25). Faller (1993) suggested a more integrated model might include elements of cultural values, family relations, environmental issues, and individual psychological elements. Milner and Chilamkurti (1991) offered an integrated model addressing socialization, biological, cognitive/affective, and behavioral factors. Some proposed models consider the child's unique characteristics as interacting with other systemic components (Lewis, 1989). Children may be instrumental in some way in eliciting violence or neglect as a result of abnormal pregnancies, illness during the first year of life, or handicapping conditions. According to Burrell, Thompson, and Sexton (1994), "Abusive parenting behavior is a consequence of the collective impact of a myriad of individual, family, community and cultural factors" (p. 1039).

The trend represented most frequently in the literature emphasized the need for mental health professionals to serve a larger array of family needs rather than focus on individual treatment efforts. Movement away from a focus on changing an individual parent or child, to strengthening the relationships and interactions between them is a common theme in current literature. This change in perspective requires a different approach to mental health services and the knowledge base, skills, and theoretical orientation of professionals. The current perspective is not a paradigm spotlighting psychopathological problems within the individual, but an orientation toward relationships, formal and informal support systems, and building on strengths rather than weaknesses. Professionals must recognize that most parents do not intend to harm their

children; rather, abuse and neglect are the result of a combination of factors, such as, cultural, environmental, societal, psychological (DePanfilis & Salus, 1992). Each theory presented in the literature has "power and adherents because it explains some part of the data" (Newberger, 1991, p. 62). However, Newberger recommended integrating the more helpful parts of the theories into an interactive, multicausal, ecosystemic theoretical perspective.

An ecosystemic paradigm "focuses on relationships, context, and wholeness; embraces the notion that reality is perceptual, subjective, and constructed; and acknowledges theoretical relativity" (Becvar & Becvar, 1994, p. 22). An integrated, ecosystemic perspective requires movement from a study of the isolated, autonomous individual to viewing the individual in context of their home, family, culture, and society. Dysfunctional behavior is seen as logical in this context. Attention shifts from viewing the individual alone to viewing the various systems within which the individual lives (Amatea & Sherrard, 1994). Mental health counseling from an ecosystemic perspective is a method of inquiry and intervention from individual to couple, to the family, and to the "larger sociocultural contexts that constitute the individual's environment" (Sherrard & Amatea, 1994, p. 3). The attention of the mental health professional shifts from focusing on the behavior of one family member to transactions involving the whole family. Individual behavior is seen as inseparable from its social context and emphasis is placed on the interrelationships among family members rather than on the individual family members.

When applied to child abuse, an ecosystemic paradigm consists of an integrated framework for observation, evaluation, and treatment of the total environment in which the family violence occurred. Abuse-focused therapy from this perspective moves from level to level; from individual, to couple, to extended family, to community and culture as needed to effectively reduce the risk of harm and keep the family intact, if possible (Cimmarusti, 1992). Mental health workers can protect all family members from violence, and enhance individual and relational health following an integrated model, refusing to view families pathologically or attaching labels to the dysfunction. Nicholas, Gobble, Crose, and Frank (1992) recommended mental health professionals choose a theoretical model consistent with the integrated, ecosystemic orientation. Ayoub, Willett, and Robinson (1992) agreed, asserting "the central assumption of our research is that multiple transactions among environmental forces, caregiver characteristics, and child characteristics make joint contributions to maladaptive parenting practices and child maltreatment" (p. 497).

The Multiple Systems Model

Trepper and Barrett (1989, 1986) proposed and developed an ecosystemic approach to viewing child abuse, which offers an integrated method for evaluating and treating families experiencing sexual and physical abuse. The Multiple Systems Model rests on a conceptual framework enabling diagnosis of multiple dimensions of intrafamilial abuse. It is a guide for a focused assessment and treatment-plan development, which observes unidimensional models as incomplete to accomplish these

tasks efficiently. The Model attempts to understand the interaction among various external, familial, and internal systems.

According to Cimmarusti (1992), who reviewed the Multiple Systems Model, the nature of family dysfunction is understood from the perspective of vulnerabilities, or constraints which limit options for healthy relationship behaviors and increase rigidity for dysfunctional habits of interaction. From the medical community, Trepper and Barrett (1989) borrow the term diathesis-stress to describe these vulnerabilities, indicating the Multiple Systems Model is designed to "identify how vulnerable a person or system is based on many contributing factors" (p. 14). Child abuse is viewed as the expression of disordered behavior at points of vulnerability based on the presence of precipitating stressful life situations. Therapeutic interventions are designed to interrupt dysfunctional sequences of behavior previously established, decreasing areas of vulnerability, and ameliorating the impact of stressful life events.

There are many possible factors contributing to a family's level of vulnerability. Trepper and Barrett identified four basic areas of vulnerability: (a) Family-of-origin of the caretakers, (b) Personality characteristics of individual family members, (c) Family systems factors, and (d) Socio-Environmental factors. Because a family has a number of vulnerability factors does not mean abuse will automatically occur. Child abuse occurs, they hypothesize, when families evidence a high degree of vulnerability in one or more of these four areas, in conjunction with a precipitating stressful event for which the family has insufficient coping mechanisms.

Family-of-origin. Family-of-origin refers to the experience of abuse experienced by one or both caretakers during their childhood. This may have been abuse directed at the individual child, or observed toward other family members. It may include a high degree of emotional deprivation or emotional neglect. The adult caretaker perceives the quality of his or her family relationship as negative, unhappy, and abusive or neglectful. The caretaker may have experienced abandonment, actual or emotional. Family-of-origin includes habits of interacting between adult and child; what was taught about child-rearing. Also, Trepper and Barrett included in this category the influence currently of the family-of-origin upon the nuclear family.

Individual personality characteristics. Trepper and Barrett do not deny the involvement of individual personality characteristics, which they recognize as one component among several in contributing to the occurrence and maintenance of abuse. Some personality characteristics which may contribute are the degree of parental impulse control. This may also apply to children, as poorly contained impulse control in children may dispose them to greater risk of parental impatience and frustration. Other characteristics within the parent are the need for immediate gratification, level or sense of guilt for inflicting pain, degree of dominance and aggressiveness. The presence of a sexual disorder may contribute to the parent perpetrating sexual abuse upon the child. Psychopathology, such as psychosis, or narcissistic, paranoid, or borderline personality disorders may increase the likelihood of the parent abusing the child. A degree of passivity or dependence of the non-offending spouse may encourage and maintain the abusive behavior of the offender.

Family systems. Factors congruent with the family system include issues of family style, family structure, and communication patterns. Family style is defined by Trepper and Barrett as the pervasive and enduring patterns of interaction among family members. A family style most vulnerable to sexual abuse is affection-seeking, characterized by great amounts of affection exchange, seduction, and object connection. Hostile-Negative is a style of interacting most vulnerable for physical abuse. Interactions among family members are marred by a reliance on displacing of anger on one another and the desire to hurt family members physically and emotionally. Violence can also be a family style, wherein the entire family is organized toward violent behavior, often paranoid displays of aggression, and poor reality testing.

The family structure is defined as the organization of the family system with regard to roles of family members, hierarchies in relationships, power organization, and family rules. "Many abused children recognize early in life that the rules in their home are different from rules in the outside world. They exercise great care in adapting to each environment" (Helfer & Kempe, 1987, p. 341). The concept of Olson's Circumplex provides a model of two interacting dimensions for evaluating family structure. The dimensions are cohesion and adaptability. Cohesion is the degree to which family members are separated or connected emotionally to one another. Cohesion is displayed as a continuum from disengaged to enmeshed. Adaptability is the extent to which a family is flexible and adaptable to change, and occurs on a continuum from rigid to chaotic.

Abusive families present in any of the extreme ranges, most often rigid and enmeshed, or chaotic and enmeshed. The rigid and enmeshed family has a strict, hierarchical nature, with inflexible rules and stereotypic roles. In the chaotic and enmeshed family, rules change constantly with little predictability for children. Formal roles fluctuate so greatly as to become inappropriate. The family experiences a feeling of being leaderless. In both structures, the family is isolated from, or suspicious of other people. The family looks to itself to satisfy individual emotional needs. When the sanctity of the family system is threatened, members rally against outsiders leading to secrecy, withdrawal from services, and continued abuse. Helfer and Kempe (1987) found "the family's external boundary, its relationship with the outside world may be closed and encased in secrecy" (p. 341) permitting the abuse experiences to continue.

Communication patterns within the family system are assessed as the degree of clarity and directness of various forms of communication, verbal and nonverbal. Patterns often seen in abusive families are conflict avoidance, secretiveness, hostility, and double-binding communication. Dysfunctional communication between father and mother, and between parent and children are commonly observed.

Socio-Environmental. The fourth component of vulnerabilities proposed by Trepper and Barrett are Socio-Environmental factors. These factors have particularly gained recent recognition as important in the assessment and treatment of abuse. Environmental conditions often present in abusive families include a high degree of social isolation accompanied by poor utilization of support systems and social resources available within the community. Attitudes toward the roles of men and women within

the community and society influence the experience of abuse. A tolerant community attitude toward abuse may encourage and maintain the behavior within the family. A general cultural acceptance of male supremacy invites the experience of sexual and physical abuse. Helfer and Kempe (1987) discussed the issue of male supremacy, stating, "A disturbance in the family's hierarchy may also be seen, either with the father desperately clinging to a patriarchal, overly controlling stance, or with him being so uninvolved that he is stripped of authority and relatively ineffective" (p. 341). Messages provided about childhood from society and religious communities lend a toleration or even recommendation for the use of physically aggressive behavior toward children.

Precipitating life events. Trepper and Barrett perceived the vulnerability factors working in conjunction with a precipitating life event, such as, a job loss, hospitalization or decrease in health of a family member, the absence unexpectedly of one parent/caretaker. Most precipitating events are idiosyncratic and not easily predicted by the family. When they occur, coping mechanisms available to the family influence how these events find resolution. Strategies individuals and families use to prevent psychosocial stress from resulting in dysfunctional behavior might include a strong social network of friends and family, reliance on consistent religious beliefs, the use of community resources, and cognitive problem-solving abilities.

Following the Multiple Systems Model, mental health workers will find "the goal of clinical assessment is to obtain information as to which factors are present which made the family particularly vulnerable, what precipitant was or typically is involved, and where the family's coping mechanisms are lacking" (Trepper & Barrett, 1989, p. 22).

The mental health professionals working with the family will then develop a treatment plan which aims to: (a) reduce vulnerability factors and their impact, (b) decrease possible precipitating events, and (c) increase family coping skills. The Model provides a basis for assessment and treatment schema, while allowing ease in communicating among therapists involved with the family. Therapy will include the entire family, intensive work with individual family members, and may include work with acquaintances and extended family members. Assessment and treatment should not attempt to isolate the one underlying cause of the abuse problem. "What is assessed, then, is the likelihood of expression of the disorder when presented with a precipitating situation" (Trepper & Barrett, 1989, p. 20). Roberts (1989) indicated a need for mental health professionals to focus on what makes some parents, children, and families more vulnerable to abuse, adding, "The concept of 'vulnerability' allows for the possibility of change and gives dignity to a family who could otherwise receive stigmatizing labels..." (p. 44).

For the purpose of the current research effort on the risk of abuse to siblings of child abuse victims, the Multiple Systems Model provided a framework for the assessment of vulnerability factors. Obtaining evidence of the relationship between intergenerational transmission of abuse and the risk of abuse to siblings addressed the vulnerability factor of Family-of-origin. Personality factors of the parent/caregiver were studied through an assessment of the impact of substance abuse or addiction in the caregiver. A pattern of repeated child abuse events was congruent with the Family Systems factors, as the family style of interacting and the family structure allow the experience of abuse to continue over time despite the previous involvement of social

agencies. Finally, the absence of a birth parent from the custodial environment corresponded to the Socio-Environmental conditions found within the Model. Further, this study gathered information on the potential for a precipitating event to have occurred in a time frame congruent with an abusive incident.

Stressful Life Events and Child Abuse

Addressing the hypothesis that a precipitating stressful life event may trigger vulnerabilities to be expressed as child abuse was one aspect of the current study. Trepper and Barrett (1989) made this a central component of their theoretical orientation. Other authors also found that stressful life experiences act as a catalyst for the manifestation of abusive incidents. Newberger (1991) discussed the impact of environmental stress as a leading precipitator of abuse, reporting how this perspective "suggests that factors in the context of family life that are felt as overwhelmingly stressful facilitate the expression of violence or interfere with a parent's ability to care for his or her children" (p. 62). Howing, Wodarski, Kurtz, and Gaudin (1993) reported on a study conducted by the University of Georgia of school-aged children, who had been physically abused. They found that stress experienced from life events contributed significantly to abusive incidents. Famularo, Barnum, and Stone (1986) reported on their study of specific risk factors associated with abuse, which indicated that general psychosocial stress was a significant factor in affecting parental functioning, leading toward abusive incidents. A study of 267 families evidencing child abuse was conducted by Egeland, Jacobvitz, and Stroufe (1988), who found these families experiencing significantly more stressful life events than the control study group. In a study of abuse perpetrated by

mothers of children with disabilities, Burrell, Thompson, and Sexton (1994) reported that "stress is the most noteworthy correlate of child abuse potential..." (p. 1046). These authors further addressed the ability of the mothers to effectively cope with stress as related to the availability of resources and social support networks.

Although precipitating life events may be unique to particular individuals and families, certain conditions appear frequently in the literature. Economic pressure and the stress associated with poverty, loosing a job, failure to find employment, unexpected and mounting financial demands, are some of the most consistently reported life experiences which seemed to contribute to child abuse (DePanfilis & Salus, 1992; Roberts, 1989; Finkelhor, Hotaling, & Yelo, 1988; Finkelhor, 1984). Other stressful circumstances reported frequently include: teenage parenthood, marital conflict and spouse abuse incidents, illness of one or both parents, divorce, or employment difficulties (Goldman & Gargiulo, 1990). Roberts (1989) reminds mental health professionals that the assault and maltreatment of a child can never be precisely predicted and may be triggered by a chance and unpredictable event. Life stressors and the capacity for the family and individual to successfully cope with them seems to account from rendering families more or less vulnerable to child abuse.

Risk Factors

One of the primary objectives of this research study was to assess the relevance of four specific risk factors as possible predictors for abuse to siblings. "Risk assessment can be defined as the systematic collection of information to determine the degree to which a child is likely to be abused or neglected at some future point in time" (Doueck,

English, DePanfilis, & Moote, 1993, p. 442). Risk assessment measures attempt to predict and perhaps diminish the likelihood of future maltreatment. The risk assessment tools available currently to mental health professionals appear inadequate. Most states still offer services to families based on severity of maltreatment which has already occurred rather than on the potential risk for future abuse, which is a more preventative approach. Entry into the welfare system as a result of a substantiated report is currently the primary way vulnerable families can receive needed mental health services. Browne and Saqi (1989) reported that the "aim of the risk strategy is to give special attention to those in greatest need of help in parenting before child maltreatment occurs" (p. 58).

Throughout most of United States, social welfare agencies discover decreased funding for meeting the needs of child abuse victims and their families, with increased demand for accountability for investigating and treating reports of abuse. According to English and Pecora (1994), "In 1987, the American Humane Association estimated an increase in referrals of 180% during the ten-year period from 1976 to 1986" (p. 451). Hutchison (1989) reported this number to be much greater for the same time period, indicating an increase in child abuse reports of 223%. Further, during the past several years, fallacious reports of abuse, particularly by divorcing parents caught in acrimonious custody disputes, has risen. There is a corresponding increase in the emotional costs to families and children, and the financial costs to the states, for investigating rising numbers of abuse reports ruled unsubstantiated (Hutchison, 1989). The pressure on mental health administrators to dispense dwindling funds while fulfilling legal and societal mandates for services has subsequently increased. "In an era of increasing referrals and

shrinking resources, decisions regarding who is going to be served, and when, becomes critical (English & Pecora, 1994, p. 452). "The risk approach to child maltreatment can be seen as a managerial tool for the flexible and rational distribution of existing resources and their maximal utilization" (Browne & Saqi, 1989, p. 57). In many agencies which deal with child abuse, decisions are often made based on intuition and emotion. Individually determined criteria are more common than empirically based specifics (Browne & Saqi, 1989). Risk assessment measures can enhance the prevention and treatment efforts of mental health professionals when based on specific and descriptive factors which have been investigated and found to have validity for predicting future abuse.

To balance the competing forces of increased need for services and dwindling resources, risk factor assessments have expanded in use. Most models categorize cases according to overall risk and specify the most critical risk factors requiring intervention. The goals of risk assessment are to: (1) help workers better identify situations where children are vulnerable to abuse or neglect, (2) improve the consistency of service delivery, (3) help administrators decide relative priorities of cases for service delivery, (4) help mental health professionals design outcome-oriented case plans and target services to the appropriate clientele effectively, and (5) screen out spurious reports of false allegations. Risk assessment is an aid to mental health practitioners and not a replacement for good casework and professional decision-making; however, understanding which familial, environmental, and individual factors may increase the likelihood of abuse provides a valuable professional tool.

There is, however, poor research study regarding risk factors and the interrelationship among specific risk variables. "The extent of our knowledge about the best criteria for evaluating safety of children at risk of maltreatment remains in its early stages" (DePanfilis & Scannapieco, 1994, p. 240). There is a need for research efforts to validate the predictive validity of specific variables as indicative of an increased risk of abuse. Most risk assessment instruments currently being implemented are "unable to achieve a high degree of predictive accuracy because of limitations in the current knowledge base and methodology" (English & Pecora, 1994, p. 456). Many risk models present variables or factors which have face validity and a measure of content validity, but "empirical evidence to support their predictive value is insufficient" (English & Pecora, 1994, p. 456).

Doueck et al. (1993), studied risk assessment measures from various states and questioned the ability of the instruments to predict abuse, as most were not products of rigorous scientific investigation and suffered serious theoretical flaws. Meddin (1984) reported that "child welfare agencies have been slow to create, empirically validate, and systematically apply decision-making criteria" (p. 368). Testing the reliability of risk assessment measures poses many difficulties. It is a dynamic process with changing factors as society changes. If specific risk factors can be empirically identified as predictive of abuse, than mental health agencies can improve their response to be more effective and timely.

Dalgleish and Drew (1989) studied 152 completed cases of child abuse where custody of the parents was removed because of their abusive behavior. Their aim was

to examine those risk factors most closely associated with severe abusive behavior by the caretaker. They found high correlation for several specific factors for child abuse and recommended continued research on the utility of risk factors to define and operationalize standards of unacceptable risk. Downing, Wells, and Fluke (1990) studied risk assessment criteria employed in eight states, finding specific factors useful in screening out false or inappropriate reports and assessing accurately levels of risk.

Though little empirical evaluation has been conducted regarding the validity of risk assessment criteria (Downing, Wells, & Fluke, 1990), the study presented in this research effort attempted to assess the association of four specific factors often cited as congruent with an increased risk of abuse. These factors are: the intergenerational transmission of abuse, prior substantiated abuse reports, absence of birth parents, and substance abuse by the caretakers.

Intergenerational Abuse

Of all risk factors mentioned, "the most consistent finding in the child abuse literature is that maltreating parents often report having been physically, sexually, or emotionally abused or neglected as children" (NCCAN, 1992, p. 11). "For many years, the view that abusive childhood experiences result in abusive parenting had achieved virtually axiomatic status" (Zaidi, Knutson, & Mehm, 1989, p. 137). The history each parent brings to the caregiver role influences how he/she is prepared to parent his or her own children. Individuals, it is hypothesized, who have not had their own developmental needs met because of abusive backgrounds may find it very difficult to meet the needs of their own children. This hypothesis arises from social learning theory, which suggests

that child abuse is a learned behavior (MacEwen, 1994; Newberger, 1991). Individuals who have experienced violent and abusive childhoods are more likely to grow up to become child and spouse abusers than individuals who experienced little or no violence in their childhood years. Family violence has "effects of which radiate in many directions for an extended period of time and touch lives of many others besides the perpetrator and the immediate victim" (Finkelhor, Hotaling, & Yelo, 1988, p. 24). Violence in the family of origin has been thought predictive of violence in one's own family.

Kaufman and Zigler (1987) conducted a critical review of the intergenerational transmission hypothesis and reported a lack of empirical evidence to support the theory despite the popularity of the belief. They highlight methodological concerns with many studies which claimed verification of the hypothesis. Of the literature they reviewed, the majority were case studies based on observations of parents whose children were treated in emergency rooms for nonaccidental injury. While these studies found strong associations between child maltreatment and parental history of abuse, they contained limited generalizability. Reliability and other methodological problems were found in most other studies reviewed. Self-report survey research projects were guided primarily by the psychiatric model of abuse and the motivation of participants in reporting a history of maltreatment must be questioned. Widom (1989) also reviewed literature regarding the hypothesis of the cycle of violence finding questionable accuracy of the information. Research studies relied primarily on surveys of adults, often college students, who may have poor recall of childhood experiences, or were perhaps influenced in their disclosures

by factors of social desirability. Widom (1989), too, found the use of weak sampling techniques involving opportunity or convenience samples, anecdotal clinical accounts, or small-scale case studies. Kaufman and Zigler (1987) and Widom (1989) suggested concern about the lack of control groups in research presented in the literature, and studies which rarely addressed etiology or causality associated with the hypothesis. Studies rarely considered the interrelationship of other risk factors through the use of multivariate methodologies. "Rejection, childhood separation, emotional cruelty, rigid and unloving discipline and physical abuse can all produce an adult who is vulnerable to relationship problems with their child" (Roberts, 1989, p. 45).

Many parents who do report abusive childhoods do not become abusive parents and the literature does not address this issue, or offer hypotheses for the change in patterns of parenting observed as children. Widom (1989) stated, "Empirical evidence demonstrating that abuse leads to abuse is fairly sparse" (p. 23). The estimated rate of transmission observed by Widom (1989) ranged generally from a low of 7% to a high of 70%. Egeland, Jacobvitz, and Stroufe (1988) found few empirical investigations to support the notion that abused children grow up to be abusing parents. Zaidi, Knutson, and Mehm (1989) criticized many studies supporting intergenerational transmission for methodological inadequacies and generally found "the empirical support for the position is not commensurate with its widespread acceptance" (p. 138). Widom (1989) concluded by stating, "It is likely that our conceptualization of the relationship between child abuse and parents' history of experiencing violence has been overly simplistic" (p. 24).

Nonetheless, the literature offers many examples of research in support of the intergenerational hypothesis. In a 1968 study reported by Widom (1989), Steele and Pollock presented one of the earliest observations of intergenerational transmission of abuse. The observations were based on clinical interviews with few participants, but made a strong contribution to advancing the belief. Zaidi et al. (1989) presented a study of 86 university students, who reported a childhood history of severe physical punishment. When shown a video of children misbehaving, these young adults consistently chose potentially injurious disciplinary responses. In a second research attempt, students with severe physically abusive childhoods were compared to individuals with mild punishment backgrounds. With repeated provocation, the students with even mild punishment histories also chose harsh disciplinary measures. Zaidi et al. (1989) also studied 507 parents and 283 children seen during an 18 month period at the Department of Psychiatry of an Iowa university. They found an association between childhood disciplinary histories of parents and physical abuse of offspring.

Often, literature offered conclusions with little or no presentation of statistical corroboration. Davis and Zitelli (1995) reported that parents with a history of family violence and or childhood abuse were at an increased risk of abusing their children. They reported little empirical evidence from their study of 80 children removed from their parents care because of abuse incidents. Egeland (1989) reported that greater than 30% of abused children become abusive parents. It was unclear how this number was achieved from the study, though Egeland (1989) concluded that "evidence exists for considering the parents' history of having been abused as a risk factor in predicting child

abuse and maltreatment" (p. 8). MacEwen (1994) presented a retrospective study of 94 adult subjects which did support intergenerational transmission of abuse. Ayoub, Willett, and Robinson (1992) studied 172 families already assessed as high risk of child maltreatment. Ayoub et al. (1992) indicated that most of the parents reported violence perpetrated against them in their family-of-origin. They did not offer any statistical verification of this inference. Carroll (1977) hypothesized that the greater the extent to which physical violence is used on a child, the greater the chance that he or she will use violence on other family members as an adult. Carroll studied 375 cases from clinical and nonclinical populations. Of the clinical population, 36.6% displayed a high degree of parental punishment and reported experiences of abuse during childhood. This compared with 14.5% of the nonclinical population. Carroll (1977) determined a high degree of correlation between first-generation physical punishment and second-generation violence. The study seemed to lack a review of other risk factors and the conclusion was presented with strong assurance despite little empirical data.

Of the related literature which offered convincing methodological and statistical verification, most concluded a strong association. Faller (1989) explored sexual abuse in the family-of-origin of sexual offenders and mothers of the victims. Cases of 154 adults experiencing intrafamilial sexual abuse were gathered. Faller found that greater than 34% of the offenders and 50% of the mothers were sexually abused as children. In a study of male incest victims, McCormack, Rokous, Hazelwood, and Burgess (1992) conducted in-depth interviews of 41 incarcerated rapists. These authors found that 31 of the 41, or 76%, reported being victims of incest, all occurring before puberty and

accompanied by physical abuse. McCormack et al. (1992) reported well-defined and structured interview measures and criteria definitions. A prospective study addressing intergenerational abuse came from Egeland, Jacobvitz, and Papatola (1987), who conducted a 54-month assessment of 267 mothers in their last trimester of pregnancy. All mothers were assessed as high-risk for caretaking problems and evidenced a large number of stressful life events. Over the course of this study, 47 of the mothers maltreated their children. Of these mothers, 70% had been physically abused as children.

The mechanisms leading to intergenerational transmission of abuse are poorly understood or studied. Zaidi et al. (1989) suggested parents from abusive families had a lowered threshold of tolerance to react with physically aggressive behavior to discipline situations. The caretaker may be quick to react with physical discipline and has a limited repertoire of effective verbal commands. The use of social learning theory is extensively criticized by MacEwen (1994), particularly the premise that behavior can be acquired by observing others. MacEwen advanced a theory that the condition of the child's dependence on the aggressor suggests a process necessitating identification with the aggressor. Whether experiencing only or witnessing aggression leads to later aggression was discussed as mediating factors for transmission. Both experiences may hold import in the process and exert cumulative effect on the expression of aggression to one's children. MacEwen (1994) raised a further question regarding the frequency and severity of aggression perpetrated against a child and the consequences as an adult caregiver. The work of MacEwen (1994) supported "the notion that there are features of family of origin aggression that affect the risk of enacting later relationship aggression" (p. 363). The

process could not be explained by exposure alone, as proposed by social learning theory, however. Carroll (1977) suggested that defensive identification occurs when the abused child has no parent to nurture and provide empathy. The child's identification creates a learning situation of low parental warmth and high degree of physical punishment. Carroll (1977) did not discuss the terms associated with these experiences and seemed to accept the process without elucidating on its etiology. As Lewis (1989) stated, "Children who are abused as children abuse their children when they become adults themselves. The analyses to date leaves the answer to questions about this in doubt" (p. 7). Egeland, Jacobvitz, and Stroufe (1988) concluded that "Abuse dose not inevitably lead to abuse" (p. 1081), and called for further research regarding the topic reminding professionals it is equally inappropriate to assert the intergenerational transmission model as false.

Prior Substantiated Abuse Reports

Mental health professionals working with child abuse can recount numerous stories of families receiving services repeatedly, as they maintain abusive behavior over many years of child rearing. Patterns established for discipline, when combined with significant vulnerability factors and chronic stress result in patterns of abuse some families seem unable to change. Jones (1987) suggested a need for mental health professionals conducting abuse-focused therapy to acknowledge that some families, for a constellation of reasons, are untreatable. Repeated efforts to create more emotionally and physically safe environments for themselves and their children fail, resulting in patterns of abuse not amenable to service intervention. For children born into family situations of prior substantiated abuse reports, where services have been offered and rendered, early removal

from the family and placement for adoption may provide the most humane chance of psychological and physiological survival (Jones, 1987).

That some families repeat episodes of abuse appears congruent for most child welfare professionals, according to English and Pecora (1994). They reviewed risk assessment measures from 40 states, finding the factor of prior substantiated abuse reports to receive the most consistent attention from all agencies. Downing, Wells, and Fluke (1990) surveyed administrative and supervisory policies in 100 mental health agencies in eight states, also observing that repeated reports garnered significant and consistent concern from the professionals involved. Despite the agreement found in these studies, both indicated that no empirical evidence could be found to validate the intuitive importance and weight given to this risk factor.

Several authors attempted to address the issue with statistical verification, though often the factor of repeated episodes of abuse was studied as an adjunct to other related topics, such as, substance abuse and child maltreatment. Helfer and Kempe (1987) reviewed completed cases of child fatalities at a university hospital in Denver, Colorado. They found that families in which children had died as a result of abuse were more likely to evidence repeat abuse episodes. Helfer and Kempe (1987) also found these families to be unamenable to treatment efforts by the mental health community. Hutchison (1989) conducted a study of familial factors indicative of increased risk of abuse, reviewing 228 open reports under investigation of maltreatment which encompassed 394 children. Of the 228 reports, 22% had previous closed substantiated reports and 21% had substantiated reports of cases still open to the agencies. DePanfilis and Scannapieco (1994) found in

their study of completed cases regarding risk factors that frequency of past harm was one factor useful in suggesting children needed to be removed from their parents' care. Though they offered this strong recommendation, the study did not present data congruent with their conclusion.

The topic of prior substantiated reports is observed in many articles, primarily earning the attention of one or two sentences suggesting the importance of addressing risk when this factor appears in the family environment. Ayoub, Willett, and Robinson (1992) identified various risk factors present across cultural groups, supporting the need to find prior abuse reports high on the risk scale. However, little empirical data could be found to corroborate recommendations for increased risk due to prior abuse reports. The current study of risk to siblings attempted to address this issue by collecting data from completed cases on the number of prior substantiated abuse reports.

Substance Abuse and the Relationship to Child Abuse

The rising increase of the use of addictive substances, such as, alcohol, cocaine, crack, heroin and other opiates, has effected all levels of society and cannot be disputed to its cost fiscally, emotionally, and socially, impacting destructively the family unit. Bays (1990) reported estimates of approximately ten million adult alcoholics in the United States, with five hundred thousand heroin or opiate addicts, and between five and eight million regular cocaine users. According to Bays (1990), greater than three hundred thousand infants are annually born to American women using crack cocaine and ten thousand infants born to women using opiates. The nation appears to experience a significant increase in the number of women abusing drugs. Particularly crucial to

neonatal care and mortality rates, women seem to abuse crack cocaine at a rate at least equal to men, leading to an increase in infants exposed to illegal and lethal substances. Exposed infants tend to be irritable, lethargic, and difficult to console, which interferes with parent-child attachment and increases the likelihood of abuse or neglect (Woodside, 1988). The National Committee for the Prevention of Child Abuse "estimates that ten million children in the United States are being raised by addicted parents, and at least 675,000 children each year are seriously mistreated by an alcoholic or drug abusing caretaker" (Bays, 1990, p. 881).

Parental substance abuse often contributes to severe family dysfunction and elevates the risk of child maltreatment (Famularo, Kinscherff, & Fenton, 1992). Substance abuse is an increasing problem for all mental health professionals, and particularly when intertwined with dynamics of child abuse. Substance abuse combined with other vulnerability factors, such as, the parent's history of childhood abuse, is resulting in mental health caseloads composed of seriously dysfunctional and abusing families (DePanfilis & Salus, 1992).

Various studies have been conducted attempting to determine the magnitude of the problem of substance abuse as related to child abuse. Indicating a paucity of literature examining the relationship, Leonard and Jacob (1988) studied 206 cases of serious child abuse and neglect reported in Boston, Massachusetts in 1987. At least one parent was suffering from documented alcohol or other-substances abuse in 43% of the cases. Leonard and Jacob (1988) reported, "Even though custody of their children was at stake, four fifths of parents referred for treatment for substance abuse did not comply" (p. 895).

Bays (1990) found that in 1987, one-half of all child abuse and neglect cases in New York City were linked to parental substance abuse. When alcohol was included in the review, this incidence increased to 64% of all cases substantiated. A 1986 survey of children placed in foster care in Illinois indicated that greater than 50% came from families with documented substance abuse problems (Leonard & Jacob, 1988). Conducting a study of substantiated reports of physical and sexual abuse, Famularo, Kinscherff, & Fenton (1992) found, "Of the 190 cases of maltreatment, two-thirds involved parents who abused substances" (p. 480). In their study, they did not observe an increase in the probability of either physical or sexual maltreatment when more than one substance was abused. Hutchison (1989) reviewed reports of abuse involving 394 children, finding that 19% of the cases were of parents abusing alcohol and 17% parents with other drug dependency. In a study of 59 child abuse cases seen at a Naval Hospital in California, 69% included at least one parent with a history of alcohol abuse (Behling, 1979). Both parents presented symptoms of alcohol addiction in ten percent of these cases. In a study of the rate of child fatalities during 1985-1992 in 10 states, 19% involved directly parental substance abuse (McCurdy & Daro, 1994).

In 1990, the Child Welfare League of America (CWLA) convened a commission to explore the connections between policies and actions associated with alcohol and other drugs, and policies and actions to protect children and strengthen families caught in the web of substance abuse. Curtis and McCullough (1993) reported on their review of 254 mental health respondents to the CWLA's commission. These respondents represented 10 states. Respondents indicated that 36.8% of their service populations (which were

not specifically related to abuse-focused therapy) were affected by problems associated with alcohol and other-drug dependencies. Tatara (1990) also joined CWLA's effort to gather information by conducting a review of agencies particularly supplying services to families experiencing abuse. Conducting a national survey of 48,964 substantiated reports of child abuse and neglect among eight states, Tatara found that 69.5% of all respondents indicated crack cocaine as a serious problem and 88.4% reported the greatest difficult providing services to crack addicts. An increased level of abandonment of infants related to substance abuse was reported by 63% of respondents, who further reported that substance abuse issues contributed to difficulties in keeping families together and increased reliance on the foster care system. Tatara (1990) reported that professionals indicated greater ability to keep children in their own family environment when substance abuse was not present. Of the respondents, 70% stated that risk assessment tools currently in use inadequately assessed the dangers posed by substance abuse.

Moving beyond incidence estimates, one study used a control group of parents not known for abusing any addictive substances. Substance abusing parents referred to the judicial system for removal of their children due to abuse were compared to the control group. Famularo, Stone, Barnum, and Wharton (1986) concluded that "parental alcoholism is one of the most destructive of the risk factors" (p. 484) for predicting child maltreatment. The parents involved in substance and child abuse showed increased aggression toward their children and each other. The family's level of stress increased, which resulted in greater number of arguments and decreased attention to the children's basic needs. Another study employing the control group method compared 54 children

with one or both parents diagnosed as alcoholic with 22 children whose parents displayed no symptoms of substance abuse (Reich, Earls, & Powell, 1988). Of the 54 children living in families with alcoholic parents, 59% experienced some form of severe physical maltreatment, compared with 9% of the control group. The homes of the alcohol-abusing parents displayed "significantly more parent-child conflict" (Reich, Earls, & Powell, 1988, p. 834). These families displayed a low level of parental-child interaction with the accompanying high level of parent-child conflict. Reich et al. (1988) "found the homes of children of alcoholics to function significantly more poorly in a number of areas, suggesting that parental alcoholism causes a global diminished functioning of the family" (p. 837).

The interaction of child abuse and substance abuse requires an understanding of the effects of intoxication and withdrawal contributing to the risk of child maltreatment (Famularo, Kinscherff, & Fenton, 1992). The psychopharmacological effects of alcohol intoxication contributing to an increased risk of physical or sexual abuse include heightened aggressive and assaultive behavior, central nervous system depression, emotional lability, decreased attention span, heightened level of irritability, and impaired judgement and cognitive decision-making processes. Components of alcohol withdrawal which may increase risk of abuse to children include elevated anxiety, depression, insomnia and sleep deprivation, headache and physical weakness, and potential hallucinosis, delusions, and delirium.

Symptoms with association for risk of child maltreatment reported by 80% of cocaine and crack users for intoxication at low to moderate doses may include socially

impaired and maladaptive behaviors, central nervous system stimulation leading to hypervigilance and agitation, feelings of euphoria and grandiosity, reduced social inhibitions, increased sexual interest, and paranoid states. Cocaine discontinuation seems characterized by anxiety, irritability, fatigue, depression, psychomotor agitation, and craving and preoccupation. All of these symptoms are related to increased risk of child abuse, though "abuse of alcohol proved to be significantly related to physical maltreatment but not sexual maltreatment. The opposite was true of cocaine abuse, which was highly associated with sexual child maltreatment, but not physical abuse" (Famularo, Kinscherff, & Fenton, 1992, p. 479). Further, these authors found from their study of 190 cases of physical and sexual abuse that during binges of alcohol or cocaine use, "nourishment, sleep, safety, survival, money, mortality, loved ones and responsibility become immaterial" (p. 477).

There appeared to be a consensus in the literature of increasing child abuse problems associated with parental substance abuse. The presence of substance abuse lengthens and complicates treatment planning and implementation for mental health professionals conducting abuse-focused therapy. Despite the apparent enormous impact of the problem for our society, few studies have investigated the association between substance abuse and child abuse (Milner & Chilamkurti, 1991). The consequences of alcohol and other drug use upon physical and sexual child abuse requires greater attention from the mental health community.

Absence of Birth Parent

The presence or absence of a birth parent in the custodial environment may result in children being raised by a single parent, a single parent living with a partner, a birth parent and stepparent, or foster or adoptive parents. The single-parent, stepparent, or parent and co-habitee families have been identified for screening purposes as posing a greater risk of physical and sexual abuse to children of all ages (Finkelhor, 1993; Browne & Saqi, 1989). As with the previously discussed risk factors, there is little empirical evidence to support the hypothesis that children are at an increased risk of abuse when one or both birth parents are absent from the primary caretaking environment (Gordon, 1989; Wilson & Daly, 1987).

Single-parenthood was mentioned by many authors (DePanfilis & Salus, 1992; Faller, 1990; Finkelhor, Hotaling, & Yelo, 1988; Helfer & Kempe, 1987) as a significant risk factor, though incidence statements were often lacking. Hutchison (1989) reported on a study of 394 physically abused children. Of the total, 64.3% came from single-parent households. This number may be misleading, however, as women receiving federal support monies rarely report living with another adult, fearing the loss of their assistance. Meddin (1984) investigated criteria suggesting a need to consider placing an abused child outside of the family, indicating single-parenthood as a significant marker for concern. The basis for this conclusion was not presented. In a longitudinal study of intergenerational transmission of abuse, Egeland, Jacobvitz, and Stroufe (1988) followed 267 families for almost five years. Of the families demonstrating physical abuse during the study, 62% occurred in the homes of single-parent mothers. From a study of 82

child fatalities attributed to abuse, Margolin (1990) reported the most common family structure was the single-parent household. According to Margolin (1990), single-parent mothers were responsible for 36% of physical abuse mortalities, higher than any other family structure. There was no information presented in any study on the risk of abuse to children raised in single-parent/father homes.

Single mothers become involved with boyfriends through dating and then, cohabitation. Males related neither legally or genetically to assume responsibility for children as caregivers and disciplinarians are "over-represented in cases of extreme child abuse" (Margolin, 1992, p. 541). In our society, there is a dearth of custom, language, and law surrounding the relationship between mother's boyfriend and her children, and few feeling rules to implicitly govern these connections. Mother's boyfriend, when living in the home, does not have a pre-defined child care role based on shared expectations. For the child, it is unclear how long the boyfriend will be there, how to act with one another, and what boundaries guide the relationship. Children often have no term or label to address mother's boyfriend. The lack of certainty and societal support for the relationship increases stress when the boyfriend is allowed caretaking functions. "By implication, if mother's boyfriend lacks the capacity to gain children's compliance based on the legitimacy of their status, successful attempts to make children obey them would require more power (i.e., the threat of more physical force) than another caregiver might usually need" (Margolin, 1992, p. 542). The boyfriend may become defensive, perceiving a lack of legitimate power. The children can represent real, as well as perceived threat's to mother's boyfriend. The mother-boyfriend and mother-child dyads

are competing for the same resource, i.e., mother's time and energy, of which both are scarce. The boyfriend, too, from the child's perspective threatens the chances of father returning home, resulting in a potentially hostile and negative scenario for interactions. The nature of the relationship establishes a situation greatly at-risk for the occurrence of abuse.

Margolin (1992) reviewed research studies of child abuse by live-in boyfriends concluding "that a young child left alone with a mother's boyfriend experiences substantially elevated risk of physical abuse" (p. 546). Mother's boyfriends generally performed only 1.75% of non-parental child care, but were responsible for about 50% of the child abuse by non-parents in a caregiving role (babysitters, aunts, uncles, siblings, grandparents). Children raised by a single mother with a transient paramour are considered at greater risk of physical and sexual abuse than the presence of stepfather or birth father (Davis & Zitelli, 1995). Hegar, Zuravin, and Orme (1994) reported their belief that a high proportion of children were at risk of severe injury by mother's boyfriends, offering no statistical basis for this conclusion.

Some studies group together the stepfather and live-in boyfriend as one category. Faller (1989) found from a review of 154 cases of intrafamilial sexual abuse that 37% of the abuse was perpetrated by a stepfather or live-in boyfriend. Greater than 60% of sexual abuse cases by stepfather or live-in boyfriend were observed in a study of male incest victims (McCormack, Rokous, Hazelwood, & Burgess, 1992). Browne and Saqi (1989) suggested the presence of a stepfather or live-in boyfriend increased the risk of child abuse and should be included on risk assessment measures.

Stepfathers generally received more attention in the literature for the role they play as perpetrators of physical and sexual abuse. Finkelhor (1984) presented a strong argument for the presence of a stepfather increasing the risk of sexual abuse, stating, "Having a stepfather was one of the strongest risk factors. This risk factor remained the strongest correlate of victimization, even when all other variables were statistically controlled" (p. 25). According to Finkelhor, Hotaling, and Yelo (1988), stepfathers posed a risk of sexual victimization five times as great as a natural father. Boys and girls were more likely to be sexually abused by a stepfather than the natural father in a case review of abuse experiences of male and female adults molested as children (Kendall-Tackett & Simon, 1992).

Regarding physical abuse, stepfathers when compared with birth fathers were more likely to inflict serious injuries (Hegar et al., 1994). Conversely, the study by Hegar et al. (1994) found that birth mothers inflicted significantly more serious physical injuries than stepmothers, though it was not clear if these birth mothers were also functioning as single parents. Goldman and Gargiulo (1990) presented a comprehensive overview of risk factors, stating, "A stepchild, depending on his or her age, is from two to six times more likely to be abused or neglected than if he or she were residing with both biological parents" (p. 28). Age of child was interwoven with abuse by a stepparent based on research conducted by Wilson and Daly (1987). They concluded that stepparent households were particularly at an increased risk of physical abuse for the youngest children. The study by Wilson and Daly (1987) involved analysis of a cohort of several thousand children born during one week in a large metropolitan area. The cohort was

followed to age five and head injuries resulting from abuse were investigated. These injuries occurred more frequently in homes with a stepparent than in any other family constellation. The incidence of abuse was greater in all age groups for children from households with one birth and one stepparent, leading Wilson and Daly (1987) to state, "Children living with single mothers experience a risk of abuse that is substantially elevated over that in two natural-parent households, although less than in natural-parent/stepparent households" (p. 223).

The stepparent's role, similar to that of mother's boyfriend, suffers from a lack of societal and community support to legitimate the position. Gordon (1989) suggested that the stepparent lacks the intimate attachment often developed early in the life of a child, which serves to neutralize sexual desire and inhibit physically destructive behavior. Reconstituted families face unique problems in addition to the normal difficulties faced by all nuclear families, thereby incurring greater levels of stress. The myth of the cruel stepparent and the victimized stepchild may result in negative stereotypes and influence disproportionate attention to reporting the stepparent for abuse. While the success of artificially established parent-child relations depends on the stepparent's wish or desire to simulate genuine parental love, there seems to be "strong reasons, both theoretical and empirical, to conclude that stepparents indeed constitute a substantial threat to children" (Wilson & Daly, 1987, p. 216).

Siblings of Identified Victims

Siblings of identified child abuse victims receive almost no critical study from the research community, though mental health professionals may intuitively assume the need

to consider them at an increased level of risk for suffering abuse. Staff and Fein (1992) reported that the issue of abuse to siblings "is not given much attention by demographers or other researchers" (p. 257). Some siblings may receive no intervention or assessment, if the therapist follows a psychiatric model designed to treat the abuser and victim only. As a result, siblings may experience abuse concurrent with the identified victim though the abuse is not yet disclosed. Also, the sibling may presently be abused if the identified victim is removed from the home. Further, clinical practice indicates that some siblings will never be abused, perhaps because the identified victim is the only child in the family targeted for abuse. Generally, there is a "scarcity of information concerning siblings and sibling issues in child welfare" (Staff & Fein, 1992, p. 258).

One of the earliest studies discussing the risk of abuse to siblings was presented by Money and Werlwas (1977), who reported case studies of folie a deux. The term means the folly or madness of two. In psychiatric literature associated with child abuse, folie a deux refers to aberrant parenting which leads to psychosocial dwarfism. In current literature, the term used for the condition is non-organic failure-to-thrive, with both parents colluding in the condition. An example would be a child of chronological age four years the size of a twelve-month old as a result of parental deprivation of an emotional and physical nature. The condition can result in fatality. Money and Werlwas observed in their case studies that when one victim was removed from the family, the next child became the victim. Other siblings were left alone, until the victim was removed. "As if on a see-saw, one child's health has been balanced by the other's illness" (Money & Werlwas, 1977, p. 359).

The concept that when a victimized child is removed from the family the next sibling becomes the target for abuse has maintained professional popularity, though little research attention. Faller (1988) investigated this concept through a study of intrafamilial sexual abuse. Faller interviewed 162 perpetrators of sexual abuse, either the father or stepfather. Fifty-nine percent of the offenders had more than two victims, generally female, in the home. Faller reported, "While the oldest female child is usually the first victim, it is common to find multiple female victims in the household" (p. 24). In each case where the perpetrator had only one victim, there was only one child in the family. Faller's work suggested that not only were children abused consecutively, but siblings certainly were also victims of abuse.

Case review of records was the primary mode of gathering data about abuse to siblings. A review of the case records of 71 children substantiated as physically abused was conducted by Rivara (1985). This study found that 47% of the siblings were also abused, though had not initially disclosed their abuse. Rosenberg (1987) presented information from a review of cases of 117 victims of Munchausen's Syndrome by Proxy. Among the families of the victims, there were ten deaths of siblings which occurred in unusual circumstances and may also have been related to Munchausen's. Rosenberg recommended professionals "look for unusual illnesses in siblings of the patient" (p. 559) receiving treatment. Merrick (1989) reviewed all cases of fatal child abuse and neglect at one agency from 1970-1979. Of the total 38 child fatalities, 11% had siblings previously substantiated as abuse victims.

The recommendation for physical examination of siblings due to increased risk of abuse was made by Helfer and Kempe (1987), who stated:

> There is approximately a 20% risk that a sibling of a physically abused child has also been abused at the same time. Therefore, all siblings under the age of 18 should be brought in for an inspection and palpation examination of the total body surface within 12 hours of uncovering an index case. (p. 193)

Despite the specificity and urgency of this recommendation, the authors presented no research data to corroborate their concern.

According to Haugaard and Reppucci (1988), the recommendation for examining siblings for physical signs of abuse was empowered by legislative action in Tennessee. All children closely associated with a victim of sexual assault and exposed to the alleged perpetrator were mandated to receive medical examinations, "even if these children denied being victims themselves" (p. 106). Haugaard and Reppucci (1988) studied the result of this directive. Their sample included a total of 247 victims and siblings or associates (cousins, age-mate friends). Medical examinations determined specific findings of sexual abuse in 42% of the primary group of identified victims. Of the associate group, medical evidence of sexual abuse was verified in 68% of the group. The authors affirmed the value of performing medical evaluations of girls closely associated with victims of sexual abuse. They further recommended that male siblings and associates of male victims also be considered as potential victims.

Other studies cited concern for the welfare of siblings, but offered only cursory statements with little empirical verification. Schmitt, Grosz, and Carrole (1976) estimated a 20% likelihood a sibling of an abused child had also been abused at some point. Attempting to assess what characteristics about the child might increase risk of

physical abuse, Herrenkohl and Herrenkohl (1979) compared 295 victims to 284 of their non-abused siblings. Child characteristics unique to the abuse victims were prematurity, perceived stubbornness, and qualities of the child which reminded the mother of emotionally painful relationships. The mothers displayed weakened attachment for the victims, but not the siblings, who were apparently at decreased risk of abuse. No other factors or areas of vulnerabilities were addressed by the study. In a similar study, Nakou and Adam (1982) compared 50 Greek children with their 53 siblings to determine child characteristics leading to abuse. There was no discussion of risk to siblings, nor assurance that the siblings had not been victims.

The current study advances the knowledge base for mental health professionals regarding the risk of abuse to siblings. Placement decisions, such as removing all children following an abuse incident, are often made quickly with inadequate basis as to the true risk to siblings. At other times, siblings are allowed to remain in potentially harmful situations since risk cannot be determined. Mental health professionals frequently receive requests for therapeutic assessment and intervention regarding abuse which ignores a perspective including all family members, focusing instead on the parents and victim. Abuse touches all family members and the potential of abuse to siblings demands attention from researchers and practitioners.

Support for the Methodological Procedures

To study dynamics associated with an increased risk of abuse to siblings, the researcher examined clinical interviews conducted with children and parents confirmed to have experienced abusive incidents. These clinical assessments are the product of cases

diagnosed and treated by the Child Protection Team (CPT) at the University of Florida's College of Medicine. The CPT began in Florida in 1978 by decree of the state legislature. The CPT was established to provide diagnostic and treatment services for child abuse victims and their families. The CPT is defined by Florida Statutes, Chapter 415 as a team of mental health and medical professionals established to provide specialized and supportive services in the diagnosis and treatment of child abuse and neglect cases. The CPT provides consultation 24 hours each day, 7 days each week.

The CPT operates on the proposition that child abuse and neglect are multifaceted problems requiring multi-disciplinary responses in order to provide comprehensive and coordinated identification, intervention, and treatment services. Members of the CPT are trained to assess dynamics of child abuse and neglect. They offer expert testimony in court cases, and training services to other mental health and medical professionals dealing with child abuse and neglect. Training and consultation may also be provided to legal and law enforcement professionals. There are 21 separate Teams in Florida each serving one or more HRS districts. The CPT is contracted by HRS and administered by Florida's Children's Medical Services. Of the total, 18 Teams are private, not-for-profit corporations, and three are based in a university or hospital setting.

Analysis of Original Existing Data

Babbie (1990) argued in a discussion of research in the social sciences that scientific research is not necessarily the collection and analysis of data generated by the researcher. Analyzing original data already existing in an as-yet unexplored manner offers "a comprehensive description and explanation of the many components of a given

social situation" (p. 32). An example of highly regarded research, according to Babbie (1990), conducted in this manner is Emile Durkeim's study of suicide, published in 1951. Durkeim was interested in discovering the primary reasons for suicide and managed a comprehensive inquiry without collecting a single original datum. Durkeim tested the hypotheses through the examination of published suicide rates for different geographical areas.

The analysis of original source data is a method used frequently in the medical and social sciences regarding child abuse. Starling, Holden, and Jenny (1995) report on a study of abusive head trauma to children and the identification of potential perpetrators. All cases of child abuse involving head trauma reported to a child protection team and the Children's Hospital in Denver, Colorado from January 1982 to January 1994 were reviewed. This study involved the analysis of data reviewed from 207 cases. While this study involved primarily physical abuse in the form of head trauma, it is quite similar to the one presented here. The study involved a similar number of reviewed cases, from a similar number of years. The child protection team in Denver is hospital and university based, and is one of models upon which Florida's system of Child Protection Teams is based.

The Committee on Child Abuse and Neglect (1994) used the method of case review to study risk factors associated with Sudden Infant Death Syndrome (SIDS). The study assessed the association of risk factors for SIDS with those risk factors for physical child abuse. The study was limited to children from birth to age one year.

Jenny, Roesler, and Poyer (1994) used the method of chart review to study risk factors for abuse and the incidence of homosexual adults accused of sexual molestation of children. All charts of sexually abused children seen from July 1991 through June 1992 were reviewed by the authors. The children were evaluated at a child abuse clinic and emergency room of an affiliated children's hospital. The study included the review of records of 352 children.

The Child Sexual Abuse Evaluation Program at Valley Medical Center in Fresno, California was the site for a review of 262 cases handled by the Center between July 1986 and July 1993 (Adams, Harper, Knudson, & Revilla, 1994). The study attempted to identify variables which could predict the presence of abnormal genital findings as a result of sexual abuse. All case files were reviewed by the principal author.

The goal of determining risk factors useful for screening child maltreatment reports was the focus of a study by Hutchison (1989). The author reviewed 228 maltreatment reports received by two semiurban offices of a northeastern state Child Protection agency between July 1986 and August 1987. The author used chart review to determine predictor and interaction variables of physical and sexual abuse.

Famularo, Kinscherff, and Fenton (1992) sampled 190 cases from a large urban juvenile court involving physical or sexual maltreatment of children. The charts were read fully by the principal author to gain data on substance abuse and its relationship to child abuse.

Case-Control Sampling Procedures

According to Afifi and Clark (1990), two main avenues of selecting a sample within the social and biomedical sciences are the Cross-Sectional sample and the Case-Control sample. The Cross-Sectional sample gathers data from a single sample resulting in two subsamples. These subsamples include those subjects who experience an event, disease, or life experience, and those who do not share any aspect of the experience. Cross-Sectional samples assume a population in a steady state, i.e., no major changes occur within the population to alter the relationship between the variables under study and the occurrence of the event. In Cross-Sectional studies, information is obtained before disease or problem status is established. All cases within a given time period should be ascertained for increased validity in Cross-Sectional sampling.

Case-Control sampling employs the method of selecting two random samples, one for which the event, disease, or life experience occurred, and one for which it did not despite the influence of and exposure to the same risk factors. Case-Control sampling gathers data to study predictive variables in a retrospective fashion. This method of sampling has the advantage of enabling researchers to specify the number of individuals experiencing or not experiencing the event for investigation. Case-Control sampling was employed for this research effort on risk factors for child abuse to siblings.

Breslow and Day (1980) extensively review the use of Case-Control sampling in the causes, distribution, and control of diseases and social problems, stating, "it is an important and perhaps the dominant form of analytical research in epidemiology, a rapid

and efficient way to evaluate a hypothesis" (p. 14).[1] In Case-Control studies, information is generally obtained after disease or problem status is established. The Cases and Controls represent samples from the total population of those experiencing the disease or problem. It is a sampling technique particularly well-suited to the study of social problems of long induction periods as "it permits us to look back through time from effects to causes" (Breslow & Day, 1980, p. 18). According to Babbie (1989), Case-Control sampling permits the analysis of existing data "by learning about human behavior by observing what people inadvertently leave behind them" (p. 292).

The word "cause" is used here in a probabilistic sense and not to suggest that constellations of factors will inevitably produce the disease or event when present, or in the absence of the factors the event will not occur. By saying a factor causes an event "we mean simply that an increase in risk results from the presence of that factor" (Breslow & Day, 1980, p. 85). For an exploratory investigation such as this study of abuse to siblings, cause-effect relationship could be considered a relationship of association of factors when compared with a particular outcome. This association emphasizes that while certain factors are often present in families where maltreatment occurs, it does not mean the presence of these factors will always result in child abuse.

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[1] Several of the referred authors present information primarily from a medical perspective, addressing research efforts within the medical community. Quotes from their works may use the word "disease" to discuss research methods and models. While these quotes may be found in this work, it does not reflect a belief that child abuse is a disease, but rather a function of many various problems and circumstances.

Rather than conducting an investigation to assess a random and unknown outcome, a Case-Control study concludes the outcome. The outcome variables are determined prior to the investigation of data. In a Case-Control study, it is the "history of risk factor exposure, as determined by retrospective interview or other means, which should properly be regarded as the random outcome" (Breslow & Day, 1980, p. 202). The objective of Case-Control sampling is to provide valid estimates of the strength of at least one hypothesized relationship or association and interactions of factors. Generalizability of results is not a principal objective of Case-Control sampling, but rather the validity of the results of relationships between predictive factors and outcome variables. Breslow and Day (1980) add, "The purpose of an analysis of a Case-Control study is to identify those factors under study which are associated with risk for the disease" (p. 84). Case-Control sampling was first used in 1926 to study the etiology of breast cancer. Since that time, it has been used extensively in studying risk factors for diseases and social problems. It was relied upon heavily in the 1950's and continues to be the chosen method for research on the relationship between smoking and lung cancer.

A Case-Control study is an investigation into the extent to which a selected individual having a specific disease or life experience (the Cases) compares to a comparable person who does not have the specific disease or life experience, but has been exposed to the same possible risk factors (the Controls). In the current study, the Cases sampled were those family units incorporating an identified child victim of physical and/or sexual abuse and at least one sibling also identified as a victim of abuse. The Controls are those family units incorporating only one identified victim from a sibling

group. The Control series must be highly comparable with a specifically defined series of Cases. This sampling procedure mimics an experimental situation in which homogeneous animals or subjects are used for comparison in an effort to improve efficiency and reduce confounding effects.

The strengths of Case-Control sampling are several. It permits the evaluation of many hypotheses simultaneously whether they have previously been evaluated or are newly offered. Second, it allows the evaluation of interactions of factors, i.e., the extent and manner in which two or more predictive variables modify the strength of one another. Case-Control sampling is informative about the process of an event or problem within a population at any point in time under study. It handles the use of a high number of subjects. Finally, it has applicability to rare as well as common life events.

The challenge in the use of Case-Control sampling is to design the Case and Control series to avoid bias. To reduce selection bias, the researcher mush select Controls from among persons who have been exposed to similar risk factors and undergone the same diagnostic assessment measures as the Cases, and were found not to have experienced the resulting event identified with the Cases. Cases should be comparable to Controls in terms of professional service use and risk exposure experience. This permits the exclusion of early cases or cases-to-be. There must also be a unity of selection ratio of Controls to Cases. Sampling fractions for Cases and Controls must be the same regardless of exposure category, as sampling is completed based on the outcome variables rather than exposure to predictive variables.

Case-Control sampling is appropriate for the study of risk factors of child abuse. Employing chart review of already completed cases permits a study of the comparison of families where the experience of abuse has occurred to a sibling group with families where only one child of a sibling group is identified as a victim. The outcome variable is determined and risk factors can be assessed for predictive value. Cases and Controls for this study were sampled on a one-to-one ratio, i.e., there was one Case for each Control sampled. The Case series and Control series received the same minimum of diagnostic evaluation and service use.

Matching of Case Series to Control Series was conducted based on age group and gender of the identified victim. Matching permits management of the confounding effects of factors which may be related to the outcome variable, though not necessarily causal or significantly associated. Matched-pairs design permits a straightforward estimation of relative risk and its statistical significance. Unmatched and matched factors can be controlled directly through the statistical method employed for analysis. With relatively few subjects in a matched study, any matched pair which is discordant for risk exposure makes a moderately large contribution to the evaluation of relative risk and statistical significance (Breslow & Day, 1980).

Age of child victims can be predictive for various types of abuse. Hegar, Zuravin, & Orme, (1994) reported, "The age of the victim is one of the most frequently and commonly cited variables in studies investigating severity of abuse" (p. 173). Children of a younger age are suspected for greater likelihood of severe threat of physical harm and fatalities, while older children may be more likely to experience sexual abuse

(Huston, Parra, Prihoda, & Foulds, 1995; Goldman & Gargiulo, 1990). "Children younger than three years of age, who cannot readily get away from an abusive adult and are developmentally unable to meet some behavioral expectations, are more likely to be victims of abuse" (David & Zitelli, 1995, p. 95). Gender of identified victims may also be significant for certain types of abuse, though the relationship is less clear than with age. Boys are more likely to be victims of physical abuse and slightly more often experience fatalities. Sexual abuse may be seen more frequently in girls than boys (Finkelhor, 1993). Though these two factors are associated or suspected as possible risk factors for child abuse, they were not chosen for the current study. Including them as factors for matching eliminates their impact as confounding factors.

Review of studies. Several studies available in the literature represent good examples of Case-Control sampling for the study of child abuse risk factors. Huston, Parra, Prihoda, and Foulds (1995) conducted an investigation of age and gender as possible risk factors. They retrospectively reviewed all cases of physical and sexual abuse from 1987-1989 at a multi-disciplinary clinic which provided medical and mental health services to child abuse victims and their families. These researchers excluded all cases not fitting the selection criteria. Using Case-Control sampling, Cases were considered the identified victims only. Controls were defined as all abused siblings of the identified victims.

Wells, McCann, Adams, Voris, and Ensign (1995) studied levels of risk for sexual abuse of prepubescent females. They aimed at describing the extent emotional, physical, and behavioral symptomatology were associated with a finding of sexual abuse.

All 204 children studied received treatment at the same agency, though it was unclear what level the minimum and maximum of mental health and medical treatment provided was acceptable for inclusion in their study. Using Case-Control sampling, the Case series included those girls who were confirmed for sexual abuse and their perpetrator was specifically identified. The researchers used two Control series. One Control series was matched for age with the Case series. This group included 68 girls confirmed for sexual abuse and their perpetrator was unknown or not conclusively identified. The second Control series incorporated 68 nonabused girls who received medical evaluation and mental health clinical interviews.

A study of the maltreatment of intellectually handicapped children and adolescents was offered by Verdugo and Bermejo (1995). The study investigated risk factors within the individual child and caretaker which might result in abuse. Through the method of Case-Control sampling, the Cases included intellectually handicapped children abused by their caretakers living in a group home facility. The Control Series were those intellectually handicapped individuals residing in the same facility, but not abused by their caretakers.

Muram, Speck, and Gold (1991) reviewed the cases of 247 girls, all siblings of identified victims of sexual abuse. They divided their subjects into three groups. The Case Series included those girls experiencing specific genital findings of sexual abuse. The Control Series involved a group of girls with abnormal genital findings, though not specifically related to sexual abuse. The third Control Series incorporated girls with normal genital findings, who may or may not have been sexually abused. All children

received a minimum service of medical examination and clinical interview by a mental health professional.

Finally, in a study of 262 children evaluated at a child protection team clinic for sexual abuse, Keary and Fitzpatrick (1994) compared two groups. The Case group involved those children found to have been sexually abused who disclosed their abuse during clinic interview and counseling sessions. The Control group included children also found to have been sexually abused, who were unable or unwilling to disclose their abuse.

Logistic Regression Analysis

Reflecting upon the requirements of a study of risk factors potentially predictive of abuse to siblings reveals several methodological demands. The analysis must allow description of the data gathered, as the investigation is exploratory. Analysis should handle the rigors of comparing discrete independent variables for their predictive value. The five independent variables contained within this study include as many as eight categories within each variable. The study addressed interactions of independent variables given a binary outcome variable. The population gains homogeneity through the process of Case-Control sampling, but maintains a high degree of non-normality. Logistic Regression analysis was chosen as the method of analyzing and modeling the data gathered during this investigation and satisfies the demands of the investigation.

The basic feature of the Logistic Regression model is the appropriateness of its use with binary outcome variables (Selvin, 1991). This method of multivariate analysis provides an estimation of the occurrence of the event under study through the calculation

of an odds ratio, or log-odds. Logistic Regression is an effective method of analysis for continuous and/or discrete variables studied as risk factors for an event, disease, or social problem (Selvin, 1991; Afifi & Clark, 1990).

As Afifi and Clark (1990) state, "One of the important benefits of the logistic model is that it allows the use of categorical independent variables" (p. 295) such as those found in this study. "Application of a logistic model uses risk factors measured in their original units, producing a less arbitrary and more powerful analysis" (Selvin, 1991, p. 214). Logistic Regression calculates the risk of disease, event, or social problem as a function of personal and behavioral characteristics (Afifi & Clark, 1990). Logistic Regression analysis is designed to provide description and test prediction values of the independent variables. Breslow and Day (1980) add that this method of analysis "gives us a simplified, quantitative description of the main features of the relationship between the several risk factors and the probability of disease (event) development" (p. 193).

Logistic Regression is a multivariate method of analysis which allows for the examination of the effects of certain variables while statistically controlling for the effects of other variables (Selvin, 1991). Further, it provides a method to examine interactions among several variables. This quality makes Logistic Regression analysis particularly adept at explaining and predicting events, which can lead to the construction of predictive tools while eliminating redundancy (Selvin, 1991). Hegar, et al (1994) conclude from their review of literature addressing risk factors of child abuse the necessity for new research efforts to utilize multivariate techniques such as Logistic Regression. They reported new research efforts must:

> (a) allow examination of the effects of certain variables while statistically controlling for the effects of other variables; (b) allow examination of the interactions among variables; (c) increase our ability to explain and predict events; (d) provide more realistic representations of the predictors of behavior; and (e) can lead to the construction of predictive tools that are parsimonious by eliminating redundant predictors. (p. 180).

The current research effort attempted to address this direction for study in the field of child abuse.

A related and more traditional method for assessing observed differences between two groups is a t test. Selvin (1991) reported, "the basic difference is the t test requires the values represented by X be normally distributed" (p. 218). The Logistic Regression approach produces an odds ratio for an event or outcome to have a linear relationship with the X variables, as these variables are not normally distributed due to their categorical nature. Logistic Regression analysis is a linear model expressed in terms of a probability of an event or experience. This probability is called the log-odds ratio and is the measurement of the probability of a given outcome for specific values of the predictive or explanatory variables (Hanushek & Jackson, 1977). The Logistic model is a more sophisticated method of analysis than the tradition t test as it "is based on postulating a specific relationship between risk factor and outcome" (Selvin, 1991, p. 218).

The coefficients in the Logistic Regression equation can be interpreted as regression coefficients, i.e., for each value of the independent variable X, we conceptualize a distribution of Y values for the dependent variables. The coefficients are described partly by the mean and variance of these values. Logistic Regression analysis is particularly appropriate for use when the independent variables are multivariate non-

normal, as seen with categorical variables. The calculation of a maximum likelihood of a relationship between the independent and dependent variables is included in the analytical technique and provides an estimation of the probabilities of data belonging to one outcome population or the other when the independent variables are non-normally distributed.

The Logistic Regression model relates a dichotomous outcome variable to a series of regression variables. This regression approach is easily generalized to incorporate the effects of more than two risk factors, or risk factors at more than two levels. A large number of possible relationships analyzed from data gathered through observational studies may be represented in this form (Pregibon, 1981). The output data from analysis employing the Logistic Regression method consists of: (a) estimates of the regression coefficients for each variable, (b) variance/covariance matrix for the estimated coefficients, and (c) one or more test statistics which measure the goodness-of-fit of the model to observed data (Breslow & Day, 1980).

The Hosmer and Lemeshow (1989) goodness-of-fit statistic, which incorporates the Pearson Chi-square statistic, was used as a test measure along with the maximum likelihood estimates already provided. According to Selvin (1991), the Chi-square statistic "will detect an association between risk factors and disease (event) with the highest probability when an association exists" (p. 175). To test how well the derived Logistic Regression equation fits the data, the Chi-square statistic compares an observed number of individuals with the number expected if the model were valid (Afifi & Clark, 1990). Babbie (1989) reports that the Chi-square statistic is a frequently used test of significance

based on the null hypothesis. It computes the distribution of values to be expected if there were no relationship between the variables. The result is a set of expected frequency distributions to determine the probability the discovered discrepancy between observed and expected values could result from sampling error alone. The critical issue is whether the data provide evidence of a non-random or "real" interaction between the dependent and independent variables. The use of Chi-square statistic provides a powerful approach to analyze such an interaction. Also, the Chi-square statistic provides a test of the null hypotheses that the coefficient representing the change in risk of an event associated with a change in the risk factor is zero. The smaller the Chi-square value, the more likely the researcher will not reject the null hypotheses. The Chi-square is a statement of the overall discrepancy between observed and expected distribution of a sample, and does not prove the relationship between the variables.

Summarily, Logistic Regression analysis addresses three important issues pertinent to the study of risk factors predictive of abuse to siblings of child victims:

1. INTERACTION--is the association between risk factors and event or problem the same for all variables under study?

2. ASSOCIATION--if the association is the same, is it substantial, i.e., not likely a result of random variation?

3. ESTIMATION--if the association is the same and it is not likely due to random variation, than what is the magnitude of the risk-problem association?

The current research effort appropriately chose the Logistic Regression Model with the accompanying test statistics of maximum likelihood estimates and Chi-square statistic.

The binary outcome variables are consistent with parameters of the Model. The independent variables are categorical and discrete, and normality of the population parameter and variables cannot be assumed. The purpose of the study was for description and prediction, which is a primary goal of the Logistic Regression model. The model permits the assessment of interaction effects.

Hutchison (1989) reported on the use of Logistic Regression multivariate analysis and Chi-square test of the null hypotheses in research on risk factors used for screening the most severe cases of child abuse. Famularo, Kinscherff, and Fenton (1992) also used these statistical methods to assess the relationship between substance abuse and child maltreatment. Adams, Harper, Knudson, and Revilla (1994) employed logistic regression analysis in a study of variables predictive for physiological findings associated with sexual abuse.

Chapter Summary

The review of literature pertinent to this research supports a study of relevant risk factors related to abuse of siblings. Data reviewed suggests that an understanding of specific factors from the areas of Family Systems, Family-of-Origin, Socio-Environmental, and Individual Personality functioning can provide information for an extensive and thorough assessment of the risk of abuse to children. Mental health professionals engaged in the provision of diagnostic and treatment interventions to children and families experiencing abuse rely on risk factors to determine which families require services more quickly to reduce the likelihood of abuse. Risk factors can determine efforts toward prevention efforts offered by mental health workers.

Although risk assessment measures are widely used, little empirical information is available to support the predictive ability of specific factors. The creation of reliable and valid measures of risk is in the infancy stage. Much of the validity for the reliance on risk factors in decision-making processes is derived from clinical therapeutic practice and the intuitive perceptions of professionals.

Of the factors chosen for study in this research effort, intergenerational transmission of abuse receives extensive acceptance as predictive of increased risk. The research to support this perception is questioned for its lack of methodological verification, despite widespread endorsement. Almost no studies with methodological accuracy were available to corroborate the belief that a history of prior substantiated incidents of child abuse increases the risk of future abuse. This risk factor, too, receives much clinical acknowledgment as a predictor of abuse, but empirical basis is lacking. The literature asserted the national concern about the rise in use of addictive substances throughout all levels of society. How the abuse of substances and the abuse of children is related remains a question. The literature presented some data to suggest an increase in physical and sexual abuse as a result of substance abuse. The mechanism for how this may occur was also presented. Whether the incidence of substance abuse in child abusing populations is greater than in the general population was not addressed. Finally, though myth suggests that stepchildren are at increased risk of abuse by step-parents, research varied in confirming the relationship. Single mothers may be a greater risk for children than stepfathers or mothers' paramours, though the research could not agree to this

position. Generally, the issue was mentioned often as a risk factor without attempts to research the incidence or etiology.

Providing mental health intervention to siblings has received inadequate notice in professional research endeavors. Siblings, however, can be the victims of abuse, though yet undetected, and in need of services. Even if they are not targeted for abuse, siblings require the attention of mental health workers, as violence observed may create emotional trauma necessitating intervention and prevention efforts. Some data exists suggesting that siblings may be at greater risk of abuse than those children already identified. Concerns for siblings by professionals has resulted in recommendations for policies requiring all siblings of victims participate in medical examinations to determine if abuse has occurred.

The Multiple Systems Model, used as the theoretical basis for this study, asserts that families display basic areas of vulnerabilities, which may be expressed as child abuse when the family attempts to cope with a stressful life experience possessing few and rigid coping mechanisms. Researchers concur that abuse results from an interaction of factors, rather than from more unidimensional perspectives. Stressful life events as precipitators of abuse are frequently noted from a survey of the literature as correlating with family vulnerabilities to create abuse experiences. While the Multiple Systems Model offers value as a theoretical framework for clinical practice, its application to research was not presented. This research effort attempted to study factors from each of the four areas of vulnerabilities proposed by the Model. Further, the research addressed whether stressful life events could be associated with abuse incidents. Also, the research studied the interaction of these factors, as recommended by related literature. Analyses of original

case histories which have received no prior review or examination is a valid research tool as evidenced by reviewed studies. The process allows an opportunity to collate and examine information from clinical diagnostic assessments. This method of study contributes relevant information to the field, as it adds new data analysis of risk to siblings from the particular perspective of the Multiple Systems Model.

CHAPTER III
METHODOLOGY

The purpose of this study was to conduct an exploratory investigation of factors that describe and predict risk of abuse to siblings of an identified child abuse victim. The aim of the study was to examine whether there are relationships between specific risk factors and increased risk of abuse to siblings. Following the theory of the Multiple Systems Model, the research hypotheses attempted to address vulnerabilities within the four areas specified by the Model: Individual Personality (excessive use of alcohol or other drugs), Socio-Environmental (absence of a birth parent), Family Systems (previous confirmed reports of abuse), and Family-of-Origin (history of parent experiencing childhood abuse). The Multiple Systems Model further espouses that vulnerabilities in these areas may be aggravated by stressful life experiences. The study addressed this aspect of the theory by assessing stress factors reported within the family environment around the time of an abuse report. The study assessed the interaction of these factors with the experience of sexual and physical abuse.

While the issue of child abuse touches many facets of daily life, the topic has found little emphasis until recently in the research efforts of mental health professionals. Dr. Krugman addressed this deficit by stating, "Sadly, the research effort in child abuse and neglect is terribly underfunded, and has lacked the natural history and longitudinal focus necessary to answer questions" (Kinard, 1994, p. 45) of a meaningful and

substantive character. Kinard (1994) asserted that research on childhood maltreatment is a sensitive subject and presents several methodological and practical research problems. Methodological concerns have resulted in the mental health community avoiding the area as viable for research efforts. Primarily, research has focused on assessment of adult survivors of childhood maltreatment and most research efforts have "relied on non-statistical observations using single cases or small-group samples" (White & Allers, 1994, p. 393).

Two specific areas of research demand attention in the current mental health deliberations regarding child abuse and neglect. First, there exists a priority for research regarding factors useful in predicting risk of future abuse (Finkelhor, 1993). English and Pecora (1992) emphasize the need for studies of predictors of abuse and the importance of studying specific risk factors applicable in different types of abuse. Also, they suggest a need to study the effect of the interaction of several pertinent risk factors. The current increase in allegations of abuse combined with stagnant or diminishing resources and a greater demand for agency accountability leads to an increased interest in the study of factors valuable in the prediction of future abuse (Doueck, English, DePanfilis, & Moote, 1993).

Second, virtually no epidemiological studies have come from mental health professionals regarding the risk of abuse to siblings of identified victims. These same professionals, however, frequently are called upon by the judiciary and protective services agencies to provide recommendations about the safety of siblings in the home environment. Most often, these recommendations stem from clinical and intuitive

decisions, perhaps missing potential victims, or punishing a family system unnecessarily when risk of future abuse is low and may not warrant intrusive intervention measures. Helfer and Kempe (1987) note that frequently when a child is abused or neglected, the family is evaluated by mental health professionals and "siblings may receive only passing scrutiny, especially if they do not present obvious behavior disorders. A closer look often reveals that they too have suffered from abuse or neglect in the past" (p. 368). As society strives to balance the competing values of families' right to privacy and children's right to protection, mental health professionals involved with child abuse and neglect must have information grounded in statistical analysis regarding the potential for risk of abuse to siblings of identified victims.

Chapter III will present the following topics pertinent to the study under consideration: (a) Research Hypotheses, (b) Population Sample, (c) Sampling Procedures, (d) Dependent and Independent Variables, (e) Description of Assessment Techniques, (f) Data Analyses to be conducted.

Research Hypotheses

For purposes of this study, the following hypotheses were examined:

H_{01}: There is no significant relationship between the risk of child abuse to siblings of an identified victim when the offending and/or non-offending parent exhibits substance abuse or severe addiction of alcohol or other drugs.

H_{02}: The relationship between the risk of child abuse and the absence of one birth parent from the custodial environment does not differ for families incorporating a sibling group with only one identified victim and sibling group with multiple victims.

H_{03}: There is no significant relationship between the risk of child abuse to siblings of an identified victim when the offending and/or non-offending parent reports a childhood history of abuse.

H_{04}: The relationship between the risk of child abuse and a history of previously confirmed reports of abuse does not differ for families incorporating a sibling group with one identified victim and sibling group with multiple victims.

H_{05}: The relationship between the risk of child abuse and the identification of stressful life situations as expressed by conflict in the parental relationship within the family environment does not differ for families incorporating a sibling group with one identified victim and sibling group with multiple victims.

Research Questions

As mental health professionals conduct abuse-focused therapy, they are called upon to offer opinions regarding the risk of abuse posed by a family to its children. In an effort to further advance the understanding of the dynamics composing an abuse experience, this research studied two questions regarding the abuse situation which may enable therapists greater information about family functioning from an ecosystemic perspective. As no research studies could be found to support a hypothetical position about these issues, they were addressed as research questions. For purposes of this study, the following research questions were examined:

1. What interaction exists between the experience of the non-offending caretaker supporting the child/victim emotionally and cognitively following a substantiated abuse report and the five risk factors considered in the research hypotheses?

2. What interaction exists between the experience of the offender using force or threats to coerce secrecy about or compliance with the abuse and the five risk factors considered in the research hypotheses?

Population Sample

The 200 cases from 1986-1995 analyzed for this study came from the CPT contracted by HRS Districts III and XIII. The University of Florida's College of Medicine, Department of Pediatrics houses and sponsors the administration of the CPT involved with the cases analyzed. This particular Team serves a 16-county area in north central Florida. These counties include: Alachua, Bradford, Citrus, Columbia, Dixie, Gilchrist, Hamilton, Hernando, Lafayette, Lake, Levy, Marion, Putnam, Sumter, Suwannee, and Union. Alachua and Marion counties hold moderately large metropolitan cities, i.e., Gainesville and Ocala. Many of the counties are rural farming communities. For the year 1990, children under the age of 18 in these counties numbered approximately 212,950. During this time period, there were 15,548 confirmed reports of child maltreatment within the 16 counties previously named. Of the confirmed reports, sexual abuse accounted for 22.8 percent of the maltreatment; physical abuse, 57.7 percent (Florida Center for Children and Youth, 1993).

Cases were referred to CPT following an allegation of physical and/or sexual abuse. Referral sources included HRS, law enforcement, private pediatricians, and hospital emergency rooms. For cases comprised by this study, all children were medically evaluated by pediatricians or nurse practitioners trained in the diagnosis of child abuse and neglect. Medical evaluations provide an important component to the diagnostic

process, assisting the mental health professional with information about family interactions and medical determination of abuse. The medical director for this CPT has over 14 years of pediatric experience specifically dealing with child abuse and neglect. The medical director holds a faculty position in the College of Medicine at the University of Florida. Several other pediatricians, trained by the medical director, may also have performed medical examinations. The nurse practitioners work exclusively for the CPT and are trained at the University of Florida, Department of Pediatrics by the medical director. The project coordinator has a master's level social work degree. The project coordinator has administered the CPT in the stated counties since its inception in November 1981.

All child clinical interviews and family psychosocial assessments reviewed for this study were completed by mental health professionals, primarily mental health counselors and social workers. Following employment, these professionals spend several months training and learning the dynamics of child abuse diagnosis, crises intervention, and treatment. Education is a continual process for these professionals through attendance at state and national conferences, group and individual supervision. Clinical interviews and psychosocial assessments completed by these professionals follow the guidelines of the American Professional Society on the Abuse of Children (APSAC). Other interviewing guidelines relied upon by case managers come from the work of Faller (1990), Hughes and Baker (1990), Sgroi (1988), and Helfer and Kempe (1987). Medical evaluations and psychosocial assessments, though written in narrative style, follow a standard format as developed and recommended by the statewide CPT and guidelines of APSAC. All

reports, therefore, appear consistent with standard protocols adopted by the state, congruent with the information gathered from unique professional disciplines.

Sampling Procedures

Permission to sample information from case files was obtained from the CPT medical director, the Chairman of the Department of Pediatrics, and District Administrators for HRS Districts III and XIII. Due to the archival nature of the data, provisions for receiving informed consent were unnecessary. Anonymity of case information was maintained by assigning each family a reference number.

As previously discussed in Chapter II, Case-Control sampling procedures were employed with a ratio of one Case Series to each Control Series. For this study, the Case Series was matched to the Control Series by sex and age group of the identified victim. Age groups were matched by ages of the identified victim for the following groups: (a) birth to age one, (b) one to four and 11/12, (c) five to 10 and 11/12, (d) eleven to 17 and 11/12. This procedure yielded a sampling configuration of 16 cells, eight cells each for the Case Series; eight for the Control Series. Sampling procedures resulted in the same number of assessments for each paired cell, to a total of 200 examined documents. The reliability of the study hinges on attempts to minimize selection bias. The use of matching and Case-Control sampling procedures increases the reliability of the study.

From 1986-1995, the CPT has retained all materials generated from the assessment of child abuse cases diagnosed by the mental health and medical professionals. Reviewing the number of cases referred to CPT for this 10-year time period, a likely

estimate exists of 1,260 cases for each year, or 12,600 for the ten-year period under study. To render an inclusive sampling procedure, two lists of random numbers were generated from 1-15,000. Family histories were selected in the order established by the random-order list. Where a file did not exist to correspond with the randomly selected number, the next file was chosen. Family histories not meeting the minimum criteria for the study were discarded. The next case was then selected based on the list of random numbers. When a randomly selected file fulfilled the minimum requirement of the study, all files of siblings associated with the chosen case were removed from the general sample. This process proceeded until a total of 100 matched pairs was attained. When the process exhausted the first list of 15,000 numbers, the second list of 15,000 numbers was used to direct the sampling until the total was achieved.

The minimum level of diagnostic assessment acceptable for this study was a medical examination of the identified child victim and a clinical interview conducted with the child. In cases where the child's age precluded an interview, a psychosocial assessment of the non-offending parent must have been completed. All cases acceptable for the study must have offered a conclusive diagnosis of sexual and/or physical abuse. Other material available in the case files which received analysis may include a medical examination of siblings, a psychosocial assessment of the caretaker who perpetrated the abuse, psychological evaluations of family members, therapeutic notes, and consultative information from HRS and law enforcement. Family assessments for the Case Series incorporated only sibling groups were all children experienced some form of child abuse.

Cases involving non-family members as abusers were eliminated from the study,

e.g., cases of abuse by babysitters, teachers, day care workers, or neighbors. Cases of abuse by siblings or adolescents were excluded, unless the parent was an adolescent at the time of the abuse incident. Although emotional maltreatment often accompanies the experience of physical and sexual abuse, cases where emotional maltreatment was the primary allegation and diagnosis were excluded from the study. Emotional maltreatment has only recently gained attention for its consequences upon the child's developing personality. Definitions of emotional maltreatment have maintained a consistent level of non-agreement among researchers and mental health professionals (Vachss, 1994). Because of the lack of clarity in definition and the poor attention given to emotional maltreatment during the past 10 years, attempting to include this experience may create many confounding issues beyond the scope of this study. Cases with less than the minimum level of evaluation as evidenced by a medical examination, and child clinical interview or adult psychosocial assessment were excluded. Cases involving sibling groups with multiple victims along with one or more non-victims were excluded.

Dependent and Independent Variables

The dependent variables for this study are the two outcome variables of: (1) abuse experienced by only one child from a sibling group, and (2) abuse experienced by more than one child from a sibling group. The Control Series, as discussed earlier in Chapter II, includes the first type of dependent variable, while the Case Series incorporates the second. The outcomes have been determined by the diagnostic procedures employed by the CPT. Medical evaluation, clinical interviews with victims and family members, collateral contacts to gather information from HRS and law enforcement, and conclusions

from therapeutic interventions have led to a substantiation of a confirmed child abuse incident to one or multiple victims within the family.

Characteristics upon which the outcome/dependent variables may rest are the independent variables. For this study, the independent variables are potentially predictive or explanatory of the abuse experienced and represented by the dependent variables. This study included five main independent variable sets, which are: (1) evidence of prior confirmed abuse incidents, (2) presence of substance abuse in the custodial environment, (3) absence of one or both birth parents from the custodial environment, (4) history of childhood abuse experienced by one or both caretakers, and (5) presence of a stressful life experience as expressed by relationship problems in the parental diad.

Within the main independent variable sets are several categories, or subsets of independent variables. For the main independent variable set of prior confirmed reports, the specific number of previous diagnosed abuse incidents of abuse was considered. Information collected indicated whether one, two, three, or four or more prior reports to HRS and/or CPT existed. Data collected furthered indicated whether the prior referral reflected an allegation of physical or sexual abuse, or neglect. Data also reported whether the children had ever been removed from parental care prior to the current referral as a result of abuse or neglect.

Independent variables within the set for substance abuse included whether: (a) the substance abuse was related to the offender or non-offending caretaker, or (b) the offender or non-offending caretaker evidenced severe substance addiction. For the main independent variable set of absence of birth parent, the subsets consisted of a

determination that the child lives (a) in a single-parent home, (b) with a birth parent and live-in companion (paramour), or (c) with a birth parent and stepparent. Independent variables within the main set of intergenerational transmission of abuse incorporated a description of the childhood as: (a) positive and nurturing, (b) unhappy, though few details are reported, (c) physically abusive, (d) emotionally abusive, (e) sexually abusive, (f) marked by observing domestic violence, or (g) abuse resulting in removal from the family. The variables within the subset of intergenerational transmission of abuse were not exclusive and more than one choice could receive endorsement.

Description of Assessment Techniques

To analyze the diagnostic processes resulting in the confirmation of an abuse allegation, a coding form was developed to record pertinent information (Appendix A). The coding form represents categories of the five independent variables identified as salient features for assessment and diagnosis by Faller (1990). Several experts in the diagnosis, treatment, and research of child abuse issues evaluated the coding instrument for content validity. Editing the coding instrument based on the review of these professionals resulted in the current technique for comprehensively recording clinical information relevant to the study. Recording of the information was completed by this researcher following careful perusal of the documentation of each family history.

The unit of analysis was the family, and a coding instrument was completed on each family unit. The coding instrument registered the assigned reference number for the family, which included designation indicating whether the analysis represented an example of a Case or Control Series, the number corresponding to the age group of the

identified victim (1-4), the gender of the identified victim (M or F), and the year from which the assessment derived (86-95). Each child within the family was coded from one through seven. The identified victim was always coded as number one, with siblings following from this child numerically from oldest to youngest sibling. The position of number one may have been occupied by the youngest child, if this was the identified victim. If the sibling was not a victim of abuse, the word "no" indicated this status under the category of Victim. The age of each child in the family at the time of referral to CPT was recorded. The sex of each child was recorded. Ethnic origin of the children was recorded for descriptive purposes.

Information from analysis of documents included descriptive data about the custodial parent(s) or parent-figure(s) at the time of the abuse incident. The information was recorded in the following manner:

(01) Birth Father

(02) Birth Mother

(03) Birth Father and Stepmother

(04) Birth Mother and Paramour

(05) Birth Mother and Stepfather

(06) Birth Father and Paramour

The alleged offender's relationship to the child victim or victims was recorded using the same list as shown for custodial parent.

To gather data regarding the use of substance abuse by the offending and/or non-offending parent, information was coded for five specific categories:

(01) no substance abuse evidenced in the family,

(02) substance abuse by non-offending caretaker,

(03) substance abuse by offender,

(04) severe substance addiction of non-offending caretaker,

(05) severe substance addiction of offender.

These categories are based on the work of Faller (1990). To distinguish more clearly the categories of substance abuse and severe substance addiction, the work of Famularo, Stone, Barnum and Wharton (1986) in studying substance abuse and its relationship to child abuse was used. Their work combined with the assessment of risk proposed by Faller (1990), resulted in the distinction between substance abuse and severe addiction defined for this study as an increase in the length of duration of illness as longer than one year. Further, this study classified substance abuse by at least three of the following criteria, while severe addiction included at least six of the following criteria:

a) individual thinks his or her level of substance use is excessive,

b) others within the individual's environment complain of excessive substance use,

c) the individual admits an inability to stop drinking or drug use when desired,

d) frequent drug or alcohol use before breakfast,

e) individual frequently misses work or evidences impaired job performance,

f) individual is unable to care for household responsibilities because of excessive drug or alcohol use,

g) frequently has trouble with friends, family members, or associates because of excessive alcohol or drug use,

h) divorce or separation where drinking or drug use was the primary reason according to the individual,

i) job loss where substance abuse was primary reason,

j) episodes on three or more occasions when the individual drank or used drugs steadily for three or more days,

k) physical violence associated with drinking on at least two occasions,

l) traffic difficulties due to excessive drinking or drug use,

m) police arrest for behavior related to drinking or drug use,

n) frequent blackouts,

o) one or more in-patient treatment attempts,

p) previous evaluation for drug or alcohol abuse,

q) history of mandatory drug and alcohol screening.

Information regarding drug and alcohol use was contained in case records and gathered during review by the researcher. Where information was unavailable, no item was endorsed.

The issue of intergenerational transmission of childhood abuse was addressed separately for the non-offending and offending caretakers. The four categories included:

(01) general childhood experience described as positive and nurturing,

(02) unhappy childhood reported with few details,

(03) abusive/neglectful childhood reported (This may include emotional, physical, and/or sexual abuse, and/or a history of observing family violence.)

(04) child removed from family because of abuse.

For the category addressing the non-offending caretaker, a fifth category was added to include children living in a home environment without a non-offending caretaker. This category stated:

(05) Non-offending caretaker not available in child's home environment.

These categories are based on the work of Faller (1990). Information provided for the psychosocial assessments may indicate endorsement of more than one of these categories. Where information was unavailable, no item was endorsed.

To address the factor of stressful life experiences present in the family environment, the following categories were addressed:

(01) presence of economic difficulties,

(02) health concerns, which may include chronic disability,
or deterioration of health during the past year of at least one family member,

(03) death of immediate or extended family member during the past year,

(04) birth during the past year within the nuclear family,

(05) problem in relationship with spouse or partner;
chronic arguing and conflict,

(06) problem in relationship with spouse or partner;
separation, divorce, or custody problems during the past year,

(07) problem in relationship with spouse or partner;
spouse abuse and violence during the past year,

(08) problem in relationship with extended family members,

(09) emotional or psychiatric problems;
acute, developing or increasing in severity,

(10) emotional or psychiatric problems;
chronic mental health history and diagnosis.

The absence of a stressful situation was indicated by the failure to endorse any of these ten items. Items numbered 05, 06, and 07 were chosen for specific attention in the data analysis. Information regarding problems in the relationship between the parents is more easily discernible from the data gathered for an abuse investigation. Often, police reports will reflect arrest records for spouse abuse. Separation, divorce, and custody issues frequently are reported as instrumental in allegations and experiences of abuse (Newberger, 1991).

Other descriptive information regarding the abuse situation was recorded. This information included whether the current allegation involved physical or sexual abuse, and the specific type of abuse committed. Further, information was recorded regarding the non-offending caretaker's level of emotional and physical support and protection of the child victim. When the non-offending caretaker failed to offer the child victim such support, this category further indicated the following descriptive information about the

non-offending caretaker: (a) expresses limited understanding and awareness of the victim's needs, (b) demonstrates denial of the abuse report, (c) demonstrates support of the offender, (d) demonstrates an unwillingness to engage with service agencies. Several of these items could receive endorsement. If a non-offending caretaker was unavailable to the child victim, data reflected this situation.

Characteristics surrounding the abuse situation were also examined for descriptive purposes, and included whether: (a) the offender admitted to the abuse, (b) the abuse was substantiated by medical evidence, (c) the abuse was substantiated by clinical assessment, (d) the abuse was of short duration, i.e., equal to or less than one month, (e) the abuse incidents occurred more than five times, (f) the offender used force or threats to coerce compliance and/or secrecy. The amount of services provided to the family by the CPT was also coded to examine any correlation between level of service use and extent of abuse experienced.

Data Analysis

Using Logistic Regression Analysis, as presented in Chapter II, the gathered data received several levels of analysis to determine which independent variables correlated with the outcome variables. The data were analyzed to explore models of risk beneficial for decision-making for mental health professionals. For each of the five main variable sets and the subsets of independent variables connected to them, means and variances were calculated. The estimated regression coefficients of the parameters of each variable were determined. These represent the slope or rate of change as a function of the dependent variable per unit change in the independent variable. The standard error of the

estimated coefficient, a measure of variance, was provided. The log odds ratio was calculated for each variable with a 95% confidence interval for the odds ratio. According to Selvin (1991), "An approximate 95% confidence interval for the regression coefficients is almost always helpful in evaluating the strength of an association" (p. 216). The value of the Hosmer-Lemeshow Chi-square distribution provided the basis for a calculation of the goodness-of-fit test statistic for the model. The greater the Chi-square value, the greater the correlation between the dependent and independent variables. A probability associated with the value of the odds ratio of $p < .05$ indicated the level of significance.

Through Logistic Regression modelling, the research questions stated in Chapter I were addressed. The first level of analysis provided percentages of each Control and Case Series endorsement for an independent variable. The Specificity and Sensitivity of this data was represented as a percentage. The odds ratio was calculated along with the upper and lower bounds of the confidence interval for a 95% level of confidence testing. The value of p as a statement of significance was calculated. A level of significance established at p less than or equal to .05 permitted analysis of the strength of association between the independent and dependent variables. The inverse of the odds ratio and confidence interval bounds was provided. When the interaction of various independent variables was calculated for multiplicative effects, the Chi square statistic, Likelihood of the estimates value, and the Fisher's Exact Test probabilities were provided. Analysis of interactions also computed the regression coefficients for the relationship. The data for the current study was analyzed using SAS/STAT/LOGISTIC (1990) and EGRET (1993) computer software programs.

Limitations of the Study

The definitive study of the question of risk factors for child physical and sexual abuse would employ a prospective, longitudinal design that collected data concerning a specific cohort of children over a time frame of many years. The methodological issues in such a study would be extremely complicated and costly. "If infinite resources were available, one would ideally conduct a prospective investigation of the entire population. Subjects would be classified at the beginning of the study period on the basis of exposure to the risk factor, and at the end of the period according to whether or not they had developed the disease (event)" (Breslow & Day, 1980, p. 70).

Much of the data collected for this study, particularly regarding history of childhood abuse by the parents, use of substances to excess, and the level of stress experienced by individuals, are subjective measures dependent on accurate self-report. The environment in which parents and children are asked to report this information is most often laden with negative emotions and perhaps severe social sanctions and consequences. The parents and children are often court-ordered to comply with medical examinations, clinical interviews, and psychosocial assessments. Though it may benefit them to cooperate in the process, adults and children realize they may implicate themselves in conduct of a criminal or socially deviant nature by revealing too personal details about their histories and family life.

While the processes of gathering information by the mental health professionals employed by the Child Protection Team are similar to professionals from Florida and the nation, and follow a general protocol, individual and professional differences may yield

varying qualities of information. The procedures and norms of the practitioners may not represent the nation, thereby diminishing generalizability of results. Further, the community served by this particular Child Protection Team of abuse experts does not contain a large metropolitan area, diminishing generalizability to such populations. Also, the results may not generalize to less severe cases.

CHAPTER IV
DATA ANALYSIS AND RESULTS

Chapter Overview

This research study endeavored to explore original source documents regarding families experiencing physical and/or sexual child abuse. Specifically, this research effort sought to ascertain factors present in the family which might enable mental health practitioners greater ability to assess risk of abuse to siblings of identified victims. Research sought to determine how specific risk factors would predict an increased risk of abuse to siblings. As little empirical data exists to guide decisions about mental health treatment and intervention services offered to families experiencing child abuse, this research study offered a vital addition to the knowledge base guiding abuse-focused therapy, particularly regarding the need for intervention with siblings. Following an eco-systemic perspective, this study assessed risk from an integrated approach of multiple interacting factors.

Chapter IV presents the following topics pertinent to the analysis of the gathered data: (a) Decision rules surrounding data collection and analysis, (b) Summation of demographic data, (c) Summation of descriptive data, (d) Analysis procedures, (e) Logistic Regression results, (f) Hypotheses testing, and (g) Chapter Summary.

Data Collection and Associated Results

Decision Rules

Information about the method of data collection was presented in detail in Chapter III. Rules guiding data collection are summarized in this section. The unit of assessment for this research study was the family. Only family units with sibling groups were chosen for analysis. Abuse must have been perpetrated by a parent or parent figure in a custodial relationship with the child. A Case-Control sampling procedure provided the basic framework for deciding how data received attention. Families incorporating only one victim from a sibling group constituted the Control Series. Abuse to all siblings from the family comprised the Case Series. The Control Series was selected from the same source as the Case Series. As a prescribed method for reducing sampling error, the Control and Case Series underwent the same diagnostic tests and were exposed to the same types of risk factors. The Control Series was found by definition prior to the study not to have experienced the same level of problem as the Case Series. Values of the predictive or independent variables were obtained in a retrospective fashion, after exposure to the social problem was established. This procedure meets the criteria for Case-Control Sampling (Selvin, 1991).

Each family assessment involved a primary identified victim. Family units were matched on the variables of age group and gender to reduce potential confounding effects of these variables upon the outcome variable. Variables found to significantly effect the outcome in a matched pairs study increase the potential impact of the results. Only families assessed through medical examination of the children and clinical interviews with

family members to have experienced confirmed physical or sexual abuse were included in the study. Documentation regarding each family unit was randomly selected based on two lists of randomly generated numbers.

The Coding Instrument (Appendix A) designed for this study enabled data collection in a systematic and confidential manner. To gather information about the reliability of the Coding Instrument to carefully reflect the family characteristics and dynamics, ten mental health professionals involved in abuse-focused therapy and intervention used the Coding Instrument to collect data. The raters were presented with documentation representing two family histories. One history each from the Control and Case Series was evaluated. The raters were instructed about the research study and the Coding Instrument. They completed data collection from the family histories using the Coding Instrument. On all areas related to the research hypotheses and questions associated with this study, the raters demonstrated a level of 100% congruence in response with each other and this researcher. In the area of Types of Abuse suffered by the child, a descriptive category, the rate of congruence fell to 60%. The primary difficulty appeared to be differing opinions about how many types of abuse the child experienced. As this category was not considered a primary area for analysis, the failure to achieve 100% congruence in response was not considered a substantial concern. Rather, the teaching of the Coding Instrument may not have reviewed the many types of abuse listed in the corresponding section.

Demographic Data

Through the random selection process, 200 family units referred to the CPT from 1986-1995 were chosen for in-depth study and analysis. Matched pair sampling procedures yielded the pairs for the Control and Case Series listed in Table 1. The numbers indicated in each cell of Table 1 closely reflect the general sample population of child abuse victims referred to the CPT. More female than male children have received assessments due to the specialized training of the CPT to diagnose sexual abuse. More female children are referred for sexual abuse than males, particularly in Age Group 3 and Age Group 4 (Sgroi, 1988). Age Group 1 involved only the experience of physical abuse and the equal number of males and females would be expected.

Table 1

Matched Sampling Totals by Age Group and Gender

	AGE GROUP 1 Birth to Age 1		AGE GROUP 2 1 to 4 & 11/12		AGE GROUP 3 5 to 10 & 11/12		AGE GROUP 4 11 to 17 & 11/12	
	M	F	M	F	M	F	M	F
CONTROL SERIES (abuse to one child from sibling group)	3	3	6	12	16	26	8	26
CASE SERIES (abuse of all children from sibling group)	3	3	6	12	16	26	8	26

The selection process resulted in the accumulation of family histories depicted in Table 2. This represents the number of family assessments randomly selected for each of the ten years encompassed by this research.

Table 2

Total Number of Documents Selected by Year

CASES RANDOMLY SELECTED	CONTROL	CASE
1986	16	6
1987	8	7
1988	5	7
1989	9	8
1990	9	10
1991	12	11
1992	10	9
1993	15	14
1994	9	17
1995	7	11
TOTAL NUMBER	100	100

Racial or ethnic background. As observed from the Coding Instrument, the classification of racial or ethnic background involved six categories. No family units fit the category of Asian or Native American. Two of the 200 families were classified Biracial, while the category, Hispanic, also received only two endorsements. As a result of the low individual representations by population category, the researcher collapsed the

racial and ethnic background variable into two categories, i.e., Majority (White, not of Hispanic origin) and Minority (African-American and Ethnic). Table 3 depicts these two categories.

Table 3

Majority and Minority Classifications

RACIAL OR ETHNIC CLASSIFICATION	CONTROL	CASE
African-American or Ethnic	20%	24%
White	80%	76%

Descriptive Data Regarding the Research Sample

Custodial parent and offender's relationship to the child. To determine whether a birth parent was absent from the custodial environment at the time abuse occurred, data collected indicated which parent figures provided care to the children. Although the Coding Instrument allowed endorsement of the category Parent's Paramour, Female, no family assessment offered data for inclusion of this category. Table 4 presents the various constellations of parent and parent figures having custody at the time abuse occurred. A birth parent was absent from the custodial environment at the time of abuse for 73% of the Control and 74% of the Case Series. The absence of a birth parent was almost identical for each Series.

Using the same listing for custodial parent, the Coding Instrument recorded the relationship of the offender to the child victim. Table 5 presents a depiction of the offender's relationship to the child/victim, indicating single and multiple offenders. The

Table 4

Custodial Parent(s) at Time of Abuse as Represented by Percentages

CUSTODIAL PARENT(S)	CONTROL	CASE
Birth Father and Birth Mother	27%	26%
Birth Mother and Stepfather	33%	14%
Birth Mother and Paramour	24%	28%
Birth Father and Stepmother	2%	12%
Birth Father	2%	3%
Birth Mother	12%	17%

Table 5

Offender's Relationship to the Child/Victim as Represented by Percentages

OFFENDER'S RELATIONSHIP	CONTROL	CASE
Birth Father	34%	37%
Birth Mother	15%	26%
Parent's Paramour, Male	23%	24%
Stepfather	24%	11%
Birth Father and Stepmother	2%	1%
Birth Mother and Stepfather	2%	1%

incidence of Birth Mother as offender was noted to be almost twice (73%) as large for the Case Series. Of the total from both Series, Birth Mothers as offenders were the only parent figure in 61% of families where they perpetrated abuse. The experience of the Stepfather as offender was more than twice (118%) as great for the Control Series.

Types of abuse experienced. To more completely understand the scope of abuse experiences which occurred in the families studied, an allegation matrix captured the specific type or types of abuse reported in the documents. More than one type of abuse could receive endorsement for each family unit assessed. Table 6 represents the number of family assessments involving physical or sexual abuse only, and families demonstrating both types of abuse. The Case and Control Series exhibited an identical number of physical abuse experiences, while the Control Series demonstrated a 31% increase in sexual abuse experiences. Families demonstrating both experiences of physical and sexual abuse were almost four times more likely to come from the Case Series.

Table 6

Category of Abuse Substantiated by Medical Evidence or Clinical Assessment

CATEGORY OF ABUSE	CONTROL	CASE
Physical Abuse Allegations	38%	38%
Sexual Abuse Allegations	62%	31%
Physical and Sexual Abuse Allegations	8%	31%

The allegation matrix indicated the specific type of abuse and its corresponding level of endorsement for each Series. Table 7 represents the various types of physical abuse experienced, along with indications regarding the frequency of emotional maltreatment, neglect (Inadequate supervision and Medical), and situations of physical abuse reported in the family's history and confirmed by collateral contacts, but victims demonstrated no current evidence of abuse. Although emotional maltreatment and neglect were not considered as primary determinants for inclusion in this study, information about

their frequency of occurrence can offer insights into family dynamics and intervention strategies. As noted in Table 7, families with multiple victims of physical or sexual abuse, i. e., the Case Series, also had an increased level of neglect. The specific types of sexual abuse confirmed within a family can be observed in Table 8.

Comparing physical abuse with sexual abuse, from the total number of offenders for both Control and Case Series, Birth Mothers committed acts of physical abuse in 95% of the abuse situations attributed to them. Families with multiple offenders (Birth Father and Stepmother, Birth Mother and Stepfather) committed only acts of physical abuse. Birth Fathers were responsible for physical abuse in 36% of the total abuse perpetrated by Birth Fathers; 82% for sexual abuse. Mother's Paramour committed acts of sexual abuse for 83% of their incidents; 47% for physical abuse. Stepfathers were responsible for physical abuse incidents at a rate of 40%. For sexual abuse, this amount rose to 74% for stepfathers. These percentages exceed 100%, as offenders were responsible for incidents of multiple types of abuse.

Table 7

Number of Types of Abuse Indicated: Physical

TYPES OF ABUSE: PHYSICAL ABUSE	CONTROL	CASE
Bone Fractures	4	11
Bruises/Welts	30	58
Burns/Scalds	2	9
Confinement/Bizarre Punishment	16	33
Cuts/Punctures/Bites	2	4
Death due to abuse/neglect	1	2
Emotional maltreatment	11	28
Family violence threatens child	2	7
Head Injury	14	7
History of Physical Abuse	6	17
Inadequate supervision; caretaker absent	3	16
Inadequate supervision; caretaker present	2	15
Medical Neglect	0	3

Table 8

Number of Types of Abuse Indicated: Sexual

TYPES OF ABUSE: SEXUAL ABUSE	CONTROL	CASE
Cunnilingus	5	5
Digital Penetration	33	40
Exploitation	2	0
Exposing child to pornography	4	8
Fellatio	14	16
Fondling	61	54

Table 8--continued

Penile penetration of the anus	6	13
Penile penetration of the vagina	21	24
Requiring child to witness sexual acts	0	4
Sexual exposure of adult to child	23	31
Sexually transmitted diseases	1	5
Use of object for penetration	4	6

Characteristics of the abuse situation. Following an allegation and investigation of child abuse, the response of the non-offending caretaker offers valuable information about the nature of the family and areas where intervention by mental health professionals may be warranted. Table 9 presents data regarding the response of the non-offending caretaker to the victim and offender. Table 9 indicates that more than twice the number of non-offending caretakers in the Control Series supported the child emotionally and materially following a confirmed allegation of abuse. The incidence of denial of the allegation, support of the offender, or unwillingness to emotionally support the victim was noted to be almost identical for the Control and Case Series. This category corresponded to Research Question 1 posed by the current study and will receive further attention later in Chapter IV.

To further assist mental health professionals conducting abuse-focused therapy, characteristics found in the abuse situation were analyzed. Data represented in Table 10 indicates that far more offenders from the Control Series admitted to their abusive actions, 23% to 9% (Case Series). Abuse was unsubstantiated by medical evidence more

frequently in the Control Series, suggesting a less severe level of abuse. Duration of abuse exceeding one month and an elevated frequency of abuse incidents (greater than five times) occurred at an increased level for the Case Series. The offenders used force or threats to coerce compliance or secrecy more often in multiple victim families. The issue of force corresponded to Research Question 2 and will receive further attention later in Chapter IV.

Table 9

Emotional Response of the Non-offending Caretaker to the Child/Victim

RESPONSE of NON-OFFENDING CARETAKER to the CHILD/VICTIM	CONTROL	CASE
Supportive	43%	20%
Equivocal or inconsistent reaction	16%	17%
Denial, support of offender, and/or unwillingness to support child	30%	37%
Non-offending caretaker not available	11%	26%

Table 10

Characteristics of the Abuse Situation

CHARACTERISTICS OF ABUSE SITUATION	CONTROL	CASE
Offender admitted to abuse	23%	9%
Abuse substantiated by medical evidence	67%	85%
Abuse substantiated by clinical assessment	97%	99%
Abuse of long duration; greater than 1 month	57%	86%
Abuse incidents occurring more than five times	45%	87%
Force/Threats used by offender to coerce compliance and/or secrecy	36%	68%

Analysis Procedures and Hypotheses Testing

Logistic Regression Analysis

Five hypotheses were tested as a part of the theoretical extension of this research. Logistic Regression was chosen to conduct analysis on the levels of association and the strength of the effects of the main independent variables on the outcome variables corresponding to the hypotheses of this study. Logistic Regression allows for the use of categorical independent variables, which predominated in this research study. Description and predication of risk factors for a particular social event are goals accomplished through the use of Logistic Regression Analysis. This regression approach capably incorporates the effects of more than two risk factors at greater than two levels of interaction (Breslow and Day, 1980). It relates a dichotomous outcome variable to a series of regression variables.

Output data for this study provided by Logistic Regression consisted of: (a) percentages of endorsement of an independent variable for the Control and Case Series, (b) levels of Specificity (no exposure to the risk factor for the Control Series) and Sensitivity (exposure to the risk factor for the Case Series) as represented by percentages, (c) odds ratio, (d) lower and upper bounds for a 95% confidence interval, and (e) level of significance represented by value of $p < .05$. Where multiplicative effects were assessed, Logistic Regression provided the (a) Chi-Square statistic, (b) Likelihood Estimates, and (c) Fisher's Exact Test for no association of interaction for the specified independent variables. Regarding the Odds Ratio, the further the statistic moves from one, the greater the level of significance that risk will increase.

Hypothesis 1: Substance Abuse and Severe Addiction of the Non-offending Caretaker and the Offender

According to Hypothesis 1, there is no relationship between substance abuse of a moderate nature or severe substance addiction by the non-offending caretaker or the offender and the increased risk of abuse to siblings. Data collected revealed information regarding the use of alcohol and other addictive drugs within the family environment at the time abuse occurred. As represented in Table 11, an indication of no substance abuse by the non-offending caretaker was endorsed in 80% of the Control Series as compared with 66% of the Case Series. Of the number of non-offending caretakers from the Control Series reporting some form of substance abuse, 70% indicated a moderate form of substance abuse, as compared to 30% demonstrating severe addiction. In the Case Series for the non-offending caretaker, substance abuse--moderate represented 59% of the total number demonstrating some from of substance-related problems, with 42% exhibiting severe addiction. The Control Series, then, reported a higher incidence of substance abuse by the non-offending caretaker as an average of the total. Severe addiction of the non-offending caretaker occurred with greater frequency in the Case Series.

Regarding substance abuse by the offender, far fewer endorsements were recorded by the Control and Case Series for no substance abuse than for the non-offending caretaker. Only 7% of the offenders from the Case Series reported no substance use; 38% from the Control Series. Of the total number of offenders reporting substance abuse--moderate or severe addiction problems, 53% indicated the moderate form of

substance abuse in the Control Series; 34% for the Case Series. This increase for the Control Series over the Case Series corresponded to averages noted for the non-offending caretaker. There was a much greater increase in severe addiction by the offender in the Case Series.

Table 11

Total Numbers of Substance Use by Non-offending Caretaker and Offender

SUBSTANCE USE	CONTROL	CASE
Non-offending Caretaker:		
no substance abuse	80*	66*
substance abuse-moderate	13	18
severe addiction	6	14
Offender:		
no substance abuse	38	7
substance abuse-moderate	33	32
severe addiction	29	61

* Numbers may not total 100 due to unavailability of information.

Various combinations of Logistic Regression analyses were completed upon the independent variable, Substance Abuse by the Non-offending Caretaker and the Offender. Determination of the level of significance of this factor was conducted for the following categories in the stated combinations: (a) substance abuse by the non-offending caretaker relative to no substance abuse reported in a family, (b) severe addiction of the non-offending caretaker relative to no substance abuse reported in a family, (c) substance abuse and severe addiction of the non-offending caretaker relative to no substance abuse reported in a family, (d) severe addiction of the non-offending caretaker relative to no

substance abuse in the family and substance abuse by the non-offending caretaker, (e) substance abuse by the offender relative to no substance abuse in the family, (f) severe addiction of the offender relative to no substance abuse in the family, (g) substance abuse and severe addiction of the offender relative to no substance abuse in the family, (h) severe addiction of the offender relative to no substance abuse in the family and substance abuse by the offender, and (i) substance abuse and/or severe addiction by non-offending caretaker or offender relative to no substance abuse. The result of this analysis can be observed in Table 12. An attempt was made to statistically compute interaction effects of this variable with other risk factors, but missing data precluded the analysis.

To test the significance of the findings of this Logistic Regression analysis, a Chi-Square statistic was calculated regarding substance abuse by the non-offender and yielded a value of 5.601 with 2 degrees of freedom and a level of significance of 0.018 when all three levels of experience represented by the variable were considered. The results furnished by the Chi Square test statistic confirmed the significance of the strength of association indicated by the Odds Ratio and p values for this variable. These values increased substantially for results of analysis regarding substance abuse by the offender. The Chi Square test statistic yielded a value of 32.749 with 2 degrees of freedom and a probability of 0.000. These results confirmed the level of significance represented by the Odds Ratio.

Table 12

Logistic Regression for Substance Use by Non-offending Caretaker and Offender

	Speci-ficity	Sensi-tivity	Odds Ratio	Lower Con. Interval	Upper Con. Interval	value of p
substance abuse, non-offender relative to no substances	85.1%	23.3%	1.73	0.81	3.69	0.1550
severe addiction, non-offender relative to no substances	93.0%	17.5%	2.83	1.03	7.77	0.0437
substance abuse and severe addiction, non-offender relative to no substances	80.0%	34.0%	2.06	1.09	3.91	0.0271
severe addiction, non-offender relative to substance abuse and no substances	94.0%	14.0%	2.55	0.94	6.93	0.0665
substance abuse offender relative to no substances	53.5%	82.1%	5.26	2.05	13.50	0.0005
severe addiction, offender relative to no substances	56.7%	89.7%	11.42	4.55	28.64	0.0001
substance abuse and severe addiction, offender relative to no substances	38.0%	93.0%	8.14	3.42	19.39	0.0001
sever addiction, offender relative to substance abuse and no substances	71.0%	61.0%	3.83	2.12	6.91	0.0001

Table 12--continued

substance abuse and severe addiction, non-offender and offender relative to no substances	35.0%	93.0%	7.15	2.99	17.09	0.0001

Based on the results of the Logistic Regression Models designed for this analysis, a significant association between increased risk of abuse to siblings and substance abuse--moderate (odds ratio = 5.26, p value < .0005) and severe addiction (odds ratio = 11.42, p value < .0001) by the offender was determined. A high level of statistical significance was maintained when severe addiction was compared with substance abuse--moderate (odds ratio = 3.83, $p < .0001$) by the offender. Further, the model indicated a statistically significant relationship between severe addiction (odds ratio = 2.83, $p < .0437$) and a combination of substance abuse--moderate and severe addiction (odds ratio = 2.06, $p < .0271$) of the non-offending caretaker and risk of abuse to siblings. Data from the study supported the rejection of Null Hypothesis 1.

Hypothesis 2: Absence of a Birth Parent From the Custodial Environment

Hypothesis 2 asserted no relationship between the absence of a birth parent from the custodial environment and an increased risk of abuse to siblings. Analysis of the variable, Absence of Birth Parent, as represented in Table 13, results in a model of the association of this variable with increased risk of abuse to siblings. As reported earlier in Chapter IV, the total number of responses entered into this calculation was 200, with 73% and 74% endorsements from the Control and Case Series respectively.

Table 13

Logistic Regression Results for Absence of Birth Parent

Specificity	Sensitivity	Odds Ratio	Lower Confidence Interval	Upper Confidence Interval	value of p
73%	26%	0.95	0.51	1.78	0.8727

The Odds Ratio for this analysis was close to 1.0 and along with the high value for p, statistical results indicated the factor did not demonstrate a level of significance sufficient to suggest further examination of this risk factor. Analysis indicated no statistically significant relationship between this independent variable and the outcome variable. Therefore, no statistical evidence existed to reject Null Hypothesis 2.

Hypothesis 3: History of Childhood Abuse Reported by the Non-offending Caretaker and the Offender

As stated in Hypothesis 3, no relationship existed between a childhood history of abuse for the non-offending caretaker or the offender and an increased risk of abuse to siblings. This independent variable set was analyzed through Logistic Regression Analysis. Four subsets of this variable were assessed during the gathering of data. The first addressed whether the parent or parent figure described their childhood as positive, nurturing and pleasant. The second independent variable was an indication the parent or parent figure experienced an unhappy childhood, but few details were reported. A third variable was an experience of physical or sexual abuse, and/or neglect as a child. Finally, information was gathered regarding the independent variable indicating the parent

or parent figure had been removed from their home during childhood as a result of abuse or neglect.

As reported in Table 14, information about the childhood history of the non-offending caretaker and the offender indicated a history 2.46 times greater for an abusive childhood experience for the offender in the Case Series. Data revealed the same percent of non-offending caretakers and offenders within the Control Series reporting an abusive history. A greater number of families with the absence of a non-offending caretaker was noted for the Case Series. An three-fold increase was observed between the Control and

Table 14

Total Numbers Regarding Childhood History of Non-offending Caretaker and Offender

CHILDHOOD HISTORY	CONTROL	CASE
Non-offending Caretaker:		
Positive and nurturing	52*	34
Unhappy; few details	19	12
Abusive and/or neglectful	13	23
Removed from home due to abuse	4	5
Non-offending caretaker not present	11	26
Offender:		
Positive and nurturing	37*	13
Unhappy; few details	43	28
Abusive and/or neglectful	13	45
Removed from home due to abuse	2	14

* Numbers may not equal 100 due to the unavailability of information.

Case Series for the offender having experienced a childhood described as positive and nurturing, with the Control Series offenders having the greater likelihood of this type of history.

For this analysis, the four independent variables were compared with the Control and Case Series for the non-offending caretaker and the offender in the following combinations: (a) unhappy childhood experiences relative to positive childhood, (b) abusive childhood experiences relative to positive childhood, (c) parent removed from home as a child because of abuse relative to positive childhood, (d) all three forms of childhood experiences relative to a positive childhood, (e) abusive childhood and removed from the home because of abuse relative to a positive childhood and an unhappy childhood experience, and (f) having been removed from the home as a child because of abuse relative to all other childhood experiences. This model of analysis was conducted for the non-offending caretaker (Table 15) and the offender (Table 16). Data gathered indicated when a non-offending caretaker was not available to the child. Of the total 200 families assessed, 39 met the criteria for the category, non-offending caretaker unavailable. They were excluded from the calculations for the variable of Childhood History of Abuse.

To test the significance of the findings of this Logistic Regression analysis, a Chi-Square statistic was calculated regarding childhood history of abuse by the non-offender and yielded a value of 4.896 with 3 degrees of freedom and a level of significance of 0.027 when all four levels of experience represented by the variable were considered. The results furnished by the Chi Square test statistic confirmed the significance of the

strength of association indicated by the Odds Ratio and p values for this variable. These values increased substantially for results of analysis regarding the childhood history of abuse by the offender. The Chi Square test statistic yielded a value of 41.243 with 3 degrees of freedom and a probability of 0.000. These results confirmed the level of significance represented by the Odds Ratio.

Table 15

Logistic Regression for History of Childhood Abuse Reported by the Non-offending Caretaker

	Specificity	Sensitivity	Odds Ratio	Lower Con. Interval	Upper Con. Interval	value of p
Unhappy relative to Positive	73.2%	26.1%	0.97	0.42	2.24	0.9357
Abusive relative to Positive	80.0%	40.6%	2.71	1.21	6.06	0.0155
Removed relative to Positive	92.9%	12.8%	1.91	0.48	7.63	0.3588
All 3 types relative to Positive	59.1%	54.1%	1.70	0.91	3.17	0.0959
Abusive and Removed relative to Positive and Unhappy	80.7%	37.8%	2.54	1.25	5.16	0.0098
Removed relative to Positive, Unhappy, and Abusive	95.5%	6.8%	1.52	0.39	5.89	0.5430

Table 16

Logistic Regression for History of Childhood Abuse Reported by the Offender

	Specifi-city	Sensiti-vity	Odds Ratio	Lower Con. Interval	Upper Con. Interval	value of p
Unhappy relative to Positive	46.3%	68.3%	1.85	0.84	4.09	0.1264
Abusive relative to Positive	74.0%	77.6%	9.85	4.07	23.83	0.0001
Removed relative to Positive	94.9%	51.6%	19.92	3.98	99.74	0.0003
All 3 types relative to Positive	39.0%	87.0%	4.27	2.09	8.72	0.0001
Abusive and Removed relative to Positive and Unhappy	84.2%	59.0%	7.67	3.89	15.15	0.0001
Removed relative to Positive, Unhappy, and Abusive	97.9%	14.0%	7.57	1.67	34.28	0.0086

Hypothesis 3 stated the relationship between the risk of abuse to multiple siblings when compared to abuse of a single victim from a sibling group did not differ when a history of childhood abuse for the parent or parent figure was reported. For the non-offending caretaker, data analysis resulted in significant relationships between an abusive childhood history (odds ratio = 2.71, $p < 0.0155$) and a combination of the categories abusive history and removed from the home as a result of abuse (odds ratio = 2.54, $p < 0.0098$) and increased risk of abuse to siblings of identified victims.

Regarding the offender, risk of abuse to siblings was found related to a childhood history of abuse at statistically significant levels. For a history of abuse alone, the level of significant relationship was substantial (odds ratio = 9.85, $p < 0.0001$). When an offender experienced removal from her/his home during childhood as a result of abuse, a level of significance was also found (odds ratio = 19.92, $p < 0.0003$). When the offender reported an unhappy or abusive childhood, this combination of experiences found statistical significance (odds ratio = 7.67, $p < 0.0001$) Finally, the relationship between increased risk of abuse to siblings and an offender's history of removal from her/his family during childhood, when compared with all other childhood experiences, appeared highly significant (odds ratio = 7.57, $p < 0.0086$). The data derived from this analysis supported the rejection of Null

Hypothesis 3.

Hypothesis 4: Prior Substantiated Abuse Reports Experienced by the Family

Whether the family under study demonstrated a pattern of child abuse and how this might be related to an increased risk of abuse to siblings was considered to test the fourth research hypothesis. Information is presented in Table 17 indicating the percentage of respondents positively demonstrating a history of prior substantiated referrals of abuse. Regarding the number of times a family had been referred previously, the total number is given and the percentage of that total for those indicating a prior abuse experience. For the Control Series, 46% of the family assessments had a history of prior referrals as compared to 82% for the Case Series. Families evidencing four or more prior referrals in the Control Series were 97% less than the Case Series. There was a 7% increase from

Control to Case Series in the number of family units with evidence that children had been removed from parental care as a result of prior abuse or neglect.

Table 17

Prior Referrals for Abuse or Neglect

PRIOR REFERRALS TO HRS and/or CPT	CONTROL	CASE
Yes	46%	82%
No	54%	18%
NUMBER OF PRIOR REFERRALS		
One	18 or 39%	13 or 16%
Two	16 or 35%	17 or 21%
Three	11 or 24%	17 or 21%
Four or more	1 or 2%	35 or 43%
CHILDREN REMOVED BECAUSE OF PRIOR ABUSE/NEGLECT		
Yes	7 or 15%	18 or 22%

The factor of Prior Substantiated Reports of Abuse as related to risk of abuse for the siblings of identified victims was analyzed for four separate categories: (a) prior reports existed, (b) prior reports of physical abuse, (c) prior reports of sexual abuse, (d) and prior reports of neglect. The data resulting from the Logistic Regression Analysis is reported in Table 18.

Table 18

Logistic Regression Results for Prior Substantiated Reports of Abuse

	Specifi-city	Sensiti-vity	Odds Ratio	Lower Con. Interval	Upper Con. Interval	value of p
Prior: Yes/No	54%	82%	5.35	2.81	10.18	0.0001
Prior: Physical	76%	65%	5.88	3.18	10.89	0.0001
Prior: Sexual	76%	46%	2.70	1.47	4.94	0.0013
Prior: Neglect	83%	42%	3.54	1.84	6.81	0.0002

As demonstrated, the main variable of Prior Substantiated Reports and each of the subset variables indicated a significant value for p. The odds ratios have moved substantially from a chance occurrence and increase the reliability of the significant level of support for this variable. All confidence intervals indicated a margin of confidence to further maintain a conclusion of significance.

A further analysis was conducted regarding any interaction effects for the main variable and the three subset variables, with the variable indicating whether children had been removed from their home because of prior substantiated abuse reports. Table 19 shows the result of these calculations. The Chi-Square values are all well below 1.0 and do not reflect a significant level of interaction. The associated probability coefficients were too great to suggest consequence of the variables. Also, the Fisher's Exact Test reported a coefficient at or close to 1.0, again indicating no association in the interaction of these factors and whether a child had been removed from the home with an increased

risk of abuse for the current situation. These results do not change the level of significance determined from the logistic regression analysis regarding the main variable of Prior Substantiated Reports and the related variables associated with type of abuse, i.e., physical, sexual, or neglect.

Table 19

Interaction Effects for Prior Reports of Physical or Sexual Abuse, or Neglect, and Child's Removal From the Family

	Chi-Square	Probability Coefficient	Fisher's Exact Test		
			Left	Right	2-Tail
Physical Abuse	0.405	0.524	0.72	1.00	1.00
Sexual Abuse	0.033	0.856	0.6 0	0.73	1.00
Neglect	0.446	0.504	0.89	0.44	0.60

Hypothesis 4 declared that the relationship between the risk of abuse and a history of previously confirmed reports of abuse did not differ for families with a single victim and multiple victims. Whether a family experienced a prior substantiated report of abuse demonstrated a statistically significant relationship (odds ratio = 5.35, $p < .0001$) with increased risk of abuse for siblings. Each of the separate categories of abuse, i. e., physical, sexual, neglect, also displayed significant evidence of the relationship with increased risk of abuse. While there was no interaction among these variables with a family having had children removed for prior referrals of abuse, the data derived from the analysis supported the rejection of Null Hypothesis 4.

Hypothesis 5: Stressful Life Experiences: Problems in the Relationship with Spouse/Partner

As stated in Hypothesis 5, there would be no difference between families with single and multiple victims when stressful life experiences were present in the form of problems in the relationship with spouse/partner. The ten categories for stressful life experiences are reported in Table 20. A family history may have indicated the presence of more than one stressful life experience. Economic difficulties were reported almost equally by the Control and Case Series families. Only two families of the 200 sampled indicated no experience of stress as defined by this study during the year prior to the abuse incidents. The Case Series data demonstrated a greater number of families experiencing spouse abuse and violence, and problems with extended family members. A substantial increase was observed for Case Series families with chronic mental health problems accompanied by a specific psychiatric diagnosis.

The main independent variable of Stressful Life Experiences received endorsement as occurring in 198 of the 200 cases comprising the sample population. As stated earlier, analysis was conducted not on the general category, but on three categories where stress could result from problems in the relationship with a spouse/partner and interfere with parenting capabilities. This sub-category of the main variable, Problems with Spouse/Partner, was chosen for analysis and divided into three categories of experience: (a) consistent arguing and conflict, (b) separation, divorce, and custody issues, (c) spouse abuse and violence. Experiences within this variable would have occurred within the past year and were an uncomplicated dynamic of the family to define as transpiring.

Table 20

Percentages of the Occurrence of Stressful Life Experiences

STRESSFUL LIFE EXPERIENCES	CONTROL	CASE
Presence of economic difficulties	71%	80%
Health concerns	15%	18%
Death of family member	3%	3%
Birth during past year	14%	17%
Relationship with spouse/partner: arguing and conflict	25%	19%
Relationship with spouse/partner: separation, divorce, custody	18%	23%
Relationship with spouse/partner: spouse abuse and violence	27%	45%
Relationship with extended family	13%	50%
Emotional or psychiatric problems: acute	31%	25%
Emotional or psychiatric problems: chronic with specific diagnosis	5%	53%
No stressful situation reported	2%	0%

Of the Control Series, 70% of the 100 families sampled reported an experience in one of these three categories. For the Case Series, 87% of the families were categorized within one of the three groups. Logistic Regression analysis of this variable as related to increased risk of abuse to siblings is reported in Table 21. Analysis was conducted for each of the three separate categories stated above and combinations of these categories relative to no problem with spouse/partner. The analysis addressed the following

relationships among the three categories: (a) consistent arguing and conflict relative to no spouse/partner relationship problems, (b) separation, divorce, and custody issues relative to no spouse/partner relationship problems, (c) spouse abuse and violence relative to no spouse/partner relationship problems, (d) all three categories relative to no spouse/partner relationship problems, (e) separation, divorce, and custody issues plus spouse abuse relative to no problem and consistent arguing and conflict, and (f) spouse abuse relative to all other categories.

All levels of interaction indicated significant association except for the category arguing and conflict. To test the significance of the findings of this Logistic Regression analysis, a Chi-Square statistic was calculated and yielded a value of 12.649 with 3 degrees of freedom and a level of significance of 0.005 when all four categories of the variable were considered. The results furnished by the Chi Square test statistic confirm the significance of the strength of association indicated by the Odds Ratio and p values for this variable.

Table 21

Logistic Regression for Stressful Life Experiences, Problem with Spouse/Partner

	Specifi-city	Sensiti-vity	Odds Ratio	Lower Con. Interval	Upper Con. Interval	value of p
arguing relative to no problem	54.6%	59.4%	1.75	0.73	4.24	0.2123
separation, etc., relative to no problem	62.5%	63.9%	2.95	1.20	7.23	0.0181
spouse abuse relative to no problem	62.5%	77.6%	3.85	1.72	8.62	0.0011
all 3 types relative to no problem	30.0%	87.0%	2.87	1.39	5.91	0.0043
separation and spouse abuse relative to arguing	55.0%	68.0%	2.60	1.46	4.62	0.0012
spouse abuse relative to arguing and separation	73.0%	45.0%	2.21	1.22	4.00	0.0085

Levels of interaction suggested a statistically significant relationship between all categories except for consistent arguing and generalized conflict. Problems in the relationship with spouse/partner stemming from a separation, divorce, or custody issues demonstrated a significant relationship (odds ratio = 2.95, $p < .0181$) to increased risk of abuse to siblings. Findings regarding spouse abuse and violence established the presence of a significant relationship (odds ratio = 2.87, $p < .0043$) between this variable and increased risk of abuse. Data from this study support the rejection of Null Hypothesis 5.

Analysis Procedures and Research Questions

Research Question 1: Support of the Child by the Non-offending Caretaker.

As advised by the literature associated with abuse-focused therapy, this research attempted to study the interaction of factors within the family environment to obtain a more ecosystemic perspective of child abuse. Question 1 asked what interaction existed between the experience of the non-offending caretaker's support of the child following a substantiated abuse report and the five risk factors considered. To address Research Question 1, data analyzed the interactions of the four risk factors reflecting the main hypotheses which found verification of statistical significance and the non-offending caretaker's response to the child following a substantiated abuse allegation. Where risk factors were analyzed regarding levels of severity, patterns or trends in the correlation between the variables were analyzed. This analysis provided a test of correlation using the Chi-Square statistic and probability coefficient to assess the level of relationship. The

larger the Chi-Square value, the greater the level of significant relationship. Table 22 represents the results from this data analysis.

Table 22

Chi-Square Analysis of the Relationship of Risk Factors with the Non-offending Caretaker's Inability to Provide Support to the Child/Victim

Patterns Associated with Risk Factors	DF	Value	Level of Significance
Prior substantiated abuse reports	1	20.024	0.000
Increase in severity of substance abuse; non-offender	2	26.115	0.000
Increase in severity of substance abuse; offender	2	9.588	0.008
Increase in severity of childhood history of abuse; non-offender	3	36.285	0.000
Increase in severity of childhood history of abuse; offender	3	10.635	0.004
Increase in severity of problems in the parental relationship	3	17.249	0.001

The non-offending caretaker's capability to offer emotional and cognitive support, and an understanding and awareness of the victim's needs following the substantiation of an abuse allegation appears to decrease as the level of severity of the risk factors increases. The category of prior reports of abuse was addressed as the presence or absence of the variable. Results suggested a relationship between prior reports and the non-offending caretaker's difficulty to provide support and understanding to the victim. An increase in the severity of substance abuse by the non-offending caretaker or offender, childhood history of abuse, and problems in the relationship with the spouse/partner

revealed significant levels of interaction with a decreased capability of the non-offending caretaker to offer the victim support. Probability coefficients range from 0.008 to 0.000, indicating significant levels of correlation. All Chi-Square values offer further validation for the strength of the relationship. These results indicated a relationship between the risk factors and the potential for the child to receive needed emotional support and understanding from the non-offending caretaker.

Research Question 2: Use of Force by the Offender

Research Question 2 sought to address the use of force or threats by the offender to coerce secrecy or compliance with abusive behavior, and the interaction of this variable with the risk factors found to have statistical significance from this study. Again, the relationship was studied regarding patterns associated with the level of severity of the risk factors, and the presence of prior substantiated abuse reports. Table 23 depicts the results of this analysis.

The use of force or threats by the offender to coerce compliance and secrecy with abusive incidents appeared related to all risk factors except the category of problems in the parental relationship. Also, the category addressing an increase in severity of childhood history of abuse for the non-offender, though satisfying the need for a probability coefficient less than 0.05, fell close to this limit and should receive more careful scrutiny and study before drawing conclusions about its significance. As substance abuse increases in severity for the non-offender and offender, the use of force appears more highly correlated to also occur. Also, when the family has experienced prior substantiated abuse reports, force seems to occur more often. A childhood history

of abuse for the offender increasing in severity has a greater potential for finding the offender using force or threats against the child.

Table 23

Chi-Square Analysis of the Relationship of the Risk Factors with the Offender's Use of Force or Threats

Patterns Associated with Risk Factors	DF	Value	Level of Significance
Prior substantiated abuse reports	1	15.705	0.001
Increase in severity of substance abuse; non-offender	2	8.115	0.017
Increase in severity of substance abuse; offender	2	12.538	0.002
Increase in severity of childhood history of abuse; non-offender	3	8.029	0.045
Increase in severity of childhood history of abuse; offender	3	20.366	0.001
Increase in severity of problems in the parental relationship	3	2.731	0.435

Chapter Summary

In summary, the analysis conducted to test the research hypotheses for this study determined the existence of significant associations between selected independent variables and the outcome measure of abuse to siblings of identified victims. Only the main variable of Absence of Birth Parent was determined to have no significant relationship with the outcome measure. Of the 200 sampled assessments, 198 indicated the presence of at least one stressful life experience during the year the abuse incident occurred. This

broad category received more narrow attention by conducting analysis on the sub-category of Problems with Spouse/Partner.

This chapter has presented discussion of the procedures for data collection, decision rules, data analysis, and results of this research. Descriptive data involving an abuse event were displayed. Finally, outcome testing to accept or reject the study's five null research hypotheses was examined. Statistical evidence derived from the analysis of data supported the rejection of null hypotheses 1, 3, 4, and 5. The interaction of the four risk factors associated with the null hypotheses with the non-offender's ability to provide emotional support to the victim and the offender's use of force was analyzed.

CHAPTER V
DISCUSSION AND RECOMMENDATIONS

> When children are beaten, pain or fear frequently have the result of which it is not pleasant to speak and which are likely subsequently to be a source of shame, shame which unnerves and depresses the mind and leads the child to shun the light and loath the light...I will spend no longer time on this matter. We know enough about it already. Quintilian, c. 35-95 A. D., Institutes of Oratory

Overview of the Study

This chapter will elaborate on the results of the statistical analysis undertaken to answer the research hypotheses of this study. Of particular interest to this researcher were five key questions. First, in the presence of abuse of an addictive substance by the non-offending caretaker and/or the offender, what increase in risk of child abuse to siblings of an identified victim would be found when comparing families with single and multiple victims from a sibling group.

A second line of inquiry involved the absence of a birth parent. Analysis was conducted regarding the influence the absence of one birth parent from the custodial environment at the time of abuse could have on the risk of abuse to siblings. This question has been asked by few studies, though present as a risk factor in the literature. Single-parent homes, the increase of mothers raising children alone, and the large number of divorces in our society resulting in family constellations with stepparents or live-in

partners are factors considered as holding potentially greater risk for children (Margolin, 1992). Further information regarding this risk factor was sought through this research.

Next, a number of variables regarding the history of childhood abuse experienced by the parent or parent-figure were examined for their potential effects and interactions with risk of abuse to siblings of children now being raised by these parents. This particular risk factor receives theoretical endorsement from the professional community dealing with child abuse; however, research data at this time provides a mixed presentation of support for the theory (MacEwen, 1994). Analysis of this factor was attempted through this research.

Analysis of data gathered for this research explored the level of significance between prior substantiated reports of abuse in a family and an increased level of risk of abuse to siblings. The frequency of past harm is used in the decision-making process regarding child abuse victims, such as, whether they will remain in their home environment, the degree of intervention services needed, and the potential for the family to make necessary changes to protect the children from further abuse. Though this factor has received almost no attention in research studies, it finds intuitive and clinical approval from the mental health professionals dealing with these cases (DePanfilis & Scannapieco, 1994).

Lastly, following the theoretical perspective of the Multiple Systems Model, this research study addressed the association of a stressful life experience with a child abuse experience. The diathesis-stress theory of the Multiple Systems Model proposes a link between these experiences (Trepper & Barrett, 1989). Assessing the myriad of stress experiences a family could demonstrate would pose a substantial research endeavor. This

study chose to assess the stress the family experiences when the parent dyad exhibits problems in their ability to relate with one another, particularly demonstrating conflict. Three specific categories of problems in this relationship were addressed, i.e., consistent arguing and conflict; separation, divorce, or custody issues; and spouse abuse and violence. The association of these three factors with risk of child abuse to siblings was examined in this study.

The Research Sample

Two hundred original source documents reflecting an experience of child abuse for the corresponding families received in-depth assessment. Through a process of random selection, these 200 families were chosen from approximately 13,000 cases of child abuse investigated by the Child Protection Team at the University of Florida in Gainesville, Florida. The case histories incorporated data from 1986-1995. Using Case-Control sampling procedures, family histories received an assessment for the presence of factors associated with the five main research hypotheses. For this study, the Case Series was defined as those families with a sibling group wherein all children had been the victims of abuse. For the Control Series, only one child from a sibling group experienced abusive incidents. Families were matched on gender and four specified age groups to reduce the confounding impact these variables might have upon analysis of data.

The 100 matched pairs of families received the same minimum level of diagnostic assessment and services of a medical examination of the child victim and a clinical interview of family members, as prescribed by the demands of Case-Control sampling. Only families with substantiated abuse reports were chosen for the study. A Coding

Instrument (Appendix A) developed for this study enabled the researcher to capture data in a systematic manner. The Coding Instrument received analysis of its content validity and reliability among different raters.

Hypothesis 1
Substance Abuse and Severe Addiction
of the Non-offending Caretaker and the Offender

The results of this research study supported the rejection of Null Hypothesis 1. Several categories of increasing severity were addressed within the main variable of substance abuse. The study assessed how a family with no evidence of substance abuse compared to substance abuse--moderate and severe substance addiction by the non-offending caretaker and the offender.

For the Control Series, 80% of the non-offending caretakers as compared with 66% of the Case Series reported no history of substance abuse. This figure dropped substantially for the offender, to 38% for the Control Series and 7% for the Case Series. From the total number of families demonstrating some form of substance abuse, families were categorized as substance abusing--moderate for the non-offending caretaker, Control (65%) and Case (53%) Series, and the offender, Control (53%) and Case (34%) Series. A difference was noted regarding the level of severe addiction between the two Series. The Control Series for the non-offending caretaker demonstrated severe addiction in 30% of the families, as compared to 41% of the Case Series families. Severe addiction of the offender was noted in 47% of the Control Series, as compared to 66% of the Case Series.

Through Logistic Regression analysis, a significant relationship was statistically determined in all separate categories of this main variable, except for substance abuse--

moderate by the non-offending caretaker. The level of significance as represented by the p value ranged from 0.0437 for severe addiction of the non-offending caretaker to 0.0001 for severe addiction of the offender. Though the level regarding severe addiction of the non-offending caretaker met the criteria for the 95% confidence level, it registered close to the bound of significance and should receive careful scrutiny. The lower confidence level for this variable of 1.03 again suggested caution in interpreting the result too strictly. However, the results for severe addiction of the offender cannot fail to suggest a statistically significant relationship between this variable and increased risk of abuse to siblings.

Further, all categories and combinations of categories for substance abuse and severe addiction by the offender proved statistically significant. Substance abuse--moderate by the offender yielded a p value < 0.0005, while all other values related to the offender were less than 0.0001. The reported odds ratio of 11.42 for severe addition of the offender supported the statistical significance of the finding for this category. Substance abuse--moderate or severe addiction by either the non-offending caretaker or the offender, when its presence or absence was compared, was also statistically significant at a p value < 0.0001. The 95% confidence interval for this category with a lower boundary of 2.99 to 17.09 represented a somewhat wider margin than reported for the category of severe addiction by the offender only, but still provided a substantial level of confidence in the relationship.

Substance abuse--moderate and severe addiction by the non-offending caretaker seem to play a role in an increased risk of abuse to siblings, though its effects appear less

rigorous than substance abuse--moderate and severe addiction by the offender. Certainly, identifying this factor as statistically associated with increased risk of abuse to siblings does not imply direct causation. Nevertheless, the substantial level of significance suggests this area as vital for mental health professionals to assess when addressing risk of abuse to siblings. Regardless of the relationship of the parent to the child, whether non-offender or offender, substance abuse must be considered in family risk assessments. As society's reliance on addictive substances increases, this factor may resonate as imperative for attention in the field of child abuse.

Hypothesis 2
Absence of a Birth Parent
From the Custodial Environment

As family constellations have changed toward a greater exclusion of a birth parent for the past two decades (DePanfilis & Salus, 1992), the relationship of this situation to child abuse has received greater attention. The current study found no statistically significant relationship between this factor and increased risk of abuse of siblings. For the Control and Case Series, a birth parent was absent almost identically at 73% and 74% respectively. This level of occurrence suggests support of the theory that more children are being raised by a parent substitute (Hegar, Zuravin, & Orme, 1994); however, support for this factor offering validity as a potential risk factor for abuse to siblings of identified victims was not available from this study. Null Hypothesis 2 could not be rejected based on the results of this study.

The data reflected interesting descriptive patterns regarding the absence of a birth parent. Birth mothers were found to have abused their children in the Case Series far

more frequently. Of the Birth Mothers found to have abused their children, 63% were single parents. Stepfathers indicated a greater level of offender status in the Control Series and perpetrated more sexual than physical abuse. The relationship of Birth Father offered an increased level of offender status for both the Control and Case Series.

Hypothesis 3
History of Childhood Abuse
Reported by the Non-offending Caretaker and Offender

Of all risk factors studied in this research effort, intergenerational transmission of abuse has received the greatest clinical support from mental health professionals as a reliable measure of risk for future abuse. As research techniques have advanced, studies of this issue find discrepant levels of support for the theory. The current research addressed reported incidents of a childhood history of abuse by the parent figures. Four levels of severity were compared for the Control and Case Series. From a childhood experience described as positive and nurturing, severity increased to a report of general unhappiness during childhood with few specific details, a report of a particular type of childhood abuse experienced, and finally, the parent reporting removal from their home during childhood because of abuse. Results from data analysis support the rejection of Null Hypothesis 3.

Regarding the non-offending caretaker, having experienced an abusive childhood resulted in a statistically significant level of relationship with increased level of risk to siblings. When the abused category was combined with having been removed from the home as a child, the relationship was also statistically significant. A childhood history of abuse appeared to have a negative impact on the non-offending caretaker's ability to

provide protection of their children from abuse. Alternatively, such a childhood history may create a situation wherein the non-offending caretaker chooses poorly their spouse or partner, relating to abusive individuals more readily. This potential behavior would correspond to the social learning theory which supports the issue of intergenerational transmission of abuse through an identification with the abuser.

The offender's childhood history of abuse and having been removed from the home because of abuse, based on the results of this study, demonstrated a statistically significant relationship with an increased risk of abuse to siblings. The least significant relationship (odds ratio = 7.57, p value < 0.0086) occurred when the category removed from the home was compared with a positive childhood and all other childhood experiences. This category contained the smallest number of endorsements for the variable and sparse data could have resulted in a larger p value than found for other categories. Nevertheless, the finding was significant. Also, when the category removed from the home was compared to a positive childhood experience, the statistical results indicated a more substantial relationship (odds ratio = 19.92, p value < 0.0003). An abusive childhood history resulted in a significant level of relationship (odds ratio = 9.85, p value < 0.0001). The only category regarding the offender which did not reveal statistical significance involved an assessment of an unhappy childhood with few reported details. The ample level of statistical significance found regarding a childhood history of abuse must caution mental health professionals to diligently seek information regarding the non-offending caretaker's and offender's childhood history of abuse to more accurately assess the level of risk to siblings of abuse victims.

Hypothesis 4
Prior Substantiated Abuse Report

Hypothesis 4 asserted no relationship between families with multiple victims and single victims when a history of abuse of the children was substantiated prior to the investigation involving the CPT. Analysis of data supported the rejection of the fourth Null Hypothesis. Of the Control Series families, 46% indicated the children had received attention for prior abuse reports. For the Case Series, this experience was reported for 82% of the families. The number of prior referrals increased considerably for the Case Series when the family experienced four or more referrals; 2% for the Control Series, 43% for the Case Series. The children's removal from the home prior to the current allegation because of abuse or neglect occurred at an increased level for the Case Series. Removal occurred 15% of the time for the Control families and 22% for the Case Series.

A statistically significant relationship was observed between the experience of prior substantiated referrals and increased risk of abuse to siblings. The odds ratio of 5.35 and p value of 0.0001 offered considerable evidence for the significance of this relationship. Also, the confidence boundaries of 2.8 and 10.2 suggested further credibility of the results, along with a high level of sensitivity of 82%. When sexual abuse, physical abuse, and neglect were considered separately, they also indicated a significant level of association with increased risk of abuse. The greatest level of significance was noted for prior reports of physical abuse (odds ratio = 5.88, p value of 0.0001), though sexual abuse and neglect demonstrated levels of significance at $p < 0.0013$ and 0.0002 respectively. The category of removal of children was assessed for its level of significance when interacting with prior reports of abuse, and the three specific types.

No interaction factor could be determined from this analysis. Regardless of the type of abuse experienced in the past, a history of substantiated abuse reports prior to a current allegation should receive serious consideration as a risk factor for abuse to siblings. As the number of substantiated abuse experiences increases, further attention must be directed to risk of future abuse. The study results emphasized a need to address issues of neglect with serious regard.

Hypothesis 5
Stressful Life Experiences:
Problems in Relationship with Spouse/Partner

Specific life situations produce stress in our everyday lives. What interaction the ability to cope with stressful situations has with child abuse has received little systematic analysis of data in the literature (Goldman & Gargiulo, 1990). The Multiple Systems Model undergirding this research study espouses a theory incorporating stress as a precipitator of child abuse incidents. To study this theory, the current study gathered data regarding stressful life experiences reported by families to have occurred during one year prior to the abuse incident.

Ten stressful life events suspected of correlating with child abuse incidents, as reported in the various literary references, were assessed for their level of occurrence. Of these ten, economic difficulties received the most frequent endorsement from the Control (71%) and Case (80%) Series. Poverty and economic stressors have often been reported as occurring congruently with child abuse. This factor and its relationship to child abuse demands greater attention. Further, the difference between families experiencing chronic mental health problems with an evaluated diagnosis of mental health

difficulties appeared much greater for the Case than the Control Series, and could receive further attention from research studies.

The current study addressed specifically the area of stress resulting from relationship problems with spouse or partner. Three separate variables within this area were analyzed for their association with risk of abuse to siblings: (a) consistent arguing and generalized conflict, (b) separation, divorce, or custody issues, and (c) spouse abuse and violence. Of these three categories, only the first category offered no statistical evidence of an association of this variable with the outcome variable. The second category of separation, divorce, or custody offered verification of statistical significance at the level of $p < 0.018$, with a corresponding odds ratio of 2.95. The third category of spouse abuse and violence, when considered relative to no problems in the parental relationship (odds ratio $= 3.85$, $p < 0.0011$) and relative to the first two categories (odds ratio $= 2.21$, $p < 0.0085$) demonstrated significant levels of interaction with increased risk of abuse to siblings. When all three categories of problems were compared to the experience of no reported difficulties in the relationship with spouse or partner, a significant relationship was found (odds ratio $= 2.87$, $p < 0.0043$). The strength of this association warrants attention from mental health professionals conducting therapeutic interventions with families demonstrating child and spouse abuse. Marriage and family counseling efforts must confront the potential for child abuse when presented with conflict, particularly violence, in the parent dyad.

While knowledge of environmental stressors does not account for intra-individual sources of strength and weakness which may render families more or less vulnerable to

the stressor, the strength of significance of this category requires notice. The stress experienced in a relationship with an adult partner may present clues as to the parent's capability to handle the stress of parenting a child (Burrell, Thompson, & Sexton, 1994). Methods of coping with stress in the relationship with an individual's spouse or partner which involve poor impulse control, explosive outbursts, and difficulty managing anxiety at a more cognitive level intimate at a similar difficulty in parenting, resulting in an increased risk of abuse to children.

Regarding separation, divorce, and custody issues, again a parent's difficulty to successfully cope with this stressor may impair their ability to cope with the sometimes frustrating task of parenting. Children may become the target for anger and fear unexpressed with the partner, or couples now rendered to single parenthood may engage in a relationship with another partner, placing the child at increased risk. A parent may inappropriately seek warmth and attachment needs through a sexualized relationship with the child.

Though this study suggests a significant relationship between the experience of stress as expressed through problems in the relationship with a spouse or partner, the mechanism for this relationship remains a question. The interaction of supportive services outside of the nuclear relationship, the emotional ability to cope with many types of stressors, and the pressure associated with parenting require further assessment. Though the abuse of a child can never be precisely predicted, this study suggests a stressful life experience as demonstrated by problems in the primary adult relationship

with one's spouse or partner portends an area of significant relationship suitable for future study.

Research Questions

Two research questions received attention in this study. First, the researcher questioned how the non-offender's ability to provide emotional and cognitive support of the child/victim following the substantiation of an abuse report interacted with the risk factors found to statistically demonstrate a relationship with risk of abuse to siblings. Trends in the severity of the risk factors and the presence of a prior substantiated abuse report were evaluated to determine any association with the level of support offered to the child. Results of the analysis indicated a statistically significant relationship between the non-offender's difficulty offering the child emotional and cognitive support and a prior substantiated abuse report; increased severity of substance abuse for the non-offender and offender; increased severity of abusive childhood histories for the non-offender and offender; and increased severity in problems in the parental relationship.

For mental health professionals involved in treatment efforts with child abuse victims and their families, the association between the support of a child/victim by the non-offending caretaker and the risk factors identified warrants therapeutic attention. Often, children not receiving necessary support from their non-offending caretaker recant their valid disclosure of abuse. This may result in the reunification of the child and the abuser prior to therapeutic services to ameliorate the potential for further abusive incidents. Mental health professionals may need to focus immediate attention on the non-offending caretaker, raising the level of care and acceptance of the allegation. The lack of support

may further highlight a need for the non-offending caretaker to deal with individual therapeutic issues surrounding a childhood history of abuse or substance addiction. Therapeutic intervention may facilitate a deeper understanding of the family dynamics involved in the abuse incidents, fostering a learning experience to decrease risk of abuse. Addressing this topic in a therapeutic environment may enable the non-offending caretaker to enhance and strengthen the relationship with the child.

The second research question examined the relationship between the same set of independent variables and the offender's use of force or threats to coerce secrecy or compliance with abuse. Results of this analysis indicated a statistically significant relationship between the offender's use of force and a prior substantiated abuse report; increased severity of substance abuse for the non-offender and offender; and increased severity of abusive childhood history for the offender. Parental relationship difficulties and the non-offender's childhood history of abuse did not demonstrate a statistically significant relationship to the use of force by the offender.

Based on these results, mental health professionals must be alert for an increased use of force or threats as the number of prior substantiated abuse reports increases. Assessing the occurrence of the use of force or threats more specifically may permit therapeutic intervention at earlier stages in the abuse pattern established by a family. Further, as the use of addictive substances increases by either parent figure, mental health therapists should consider an assessment of how force is used by the offender, and how the non-offending caretaker may fail to promote a safe and protective environment for the child. Also, therapeutic interventions with the offenders to deal with issues surrounding their

experience of childhood abuse may decrease the likelihood of the use of force or threats in abusive incidents as a parent.

This data offered information beneficial to a broader understanding of the family dynamics involved with an abusive incident. It offers no predictive validity, but, rather suggests an area of concern for which mental health professionals must maintain awareness. As these variables were exploratory and descriptive primarily, further research study could offer greater clarification of the relationships between various family dynamics and the non-offender's difficulty emotionally supporting the child, and the offender's use of force or threats, and the corresponding mental health interventions appropriate to the situation.

Recommendations

Improvements in Study Design

To provide mental health services to families experiencing abuse requires knowledge of risk factors which might place children at greater or lesser risk of future abuse incidents. Such knowledge enables clinicians to deliver services aimed at ameliorating or reducing the potential risk of abuse. This research effort attempted to gain information regarding risk factors potentially significant as predictors of abuse, particularly to siblings of identified victims. In comparing families encompassing multiple victims with families incorporating only a single victim, this study researched five potential risk factors. Further research studies must continue to address the topic of risk factors in general and to siblings specifically.

This study conducted its analysis through matched pairs sampling procedures to reduce the confounding effects of age and gender; however, age of the child at time of abuse may interact with risk factors in a deleterious or protective manner, and further research might study this connection. Age may have an effect on the order or progression of abuse, so that an oldest child may be at greater risk of sexual abuse, while a younger sibling would experience increased risk of physical abuse. Older siblings may protect younger ones from an abusive experience. Also, the study excluded families incorporating sibling groups with multiple victims when some of the siblings had not been abused. Understanding what dynamics led to the abuse of some, but not all, and not an isolated victim would benefit the understanding of what makes certain children at greater risk in some families.

The study did not address characteristics associated with the child, such as, personality, behavioral, physiological, which might increase the likelihood of abuse within a sibling group. Analysis in future research efforts could determine specific characteristics making the child a specific target for maltreatment for some reason. Further, the child's behavior may interact in some manner with the risk factors identified from this study, such as, the influence of the child's behavior and the interaction with an alcoholic parent, and analysis of this interaction could supplement immensely the current knowledge base.

Although this study attempted to address the interaction of several factors, continued emphasis on the interaction of family dynamics is recommended. Following an ecosystemic perspective, research could assess further the interaction of substance abuse

with childhood history of abuse by the parents, for example. Many permutations of risk factors could be assessed and offer valuable information about the potential to predict, and thereby attempt to reduce the incidence of child abuse. The interaction of substance abuse with other factors would continue to offer insight for the mental health community regarding the effects of substance abuse and addiction upon child abuse.

Regarding intergenerational transmission of abuse, gathering more detailed information about the parent's history during clinical interviews could produce a broader and more complex picture of the abuse experience. Items such as, who was the abuser, how long did the abuse occur, what forms of abuse were observed as well as experienced could provide a comprehensive perspective for understanding the generational aspect of abuse, and the congruence of the social learning theory with intergenerational transmission.

Although the absence of a birth parent did not result in a statistically significant relationship with risk of abuse to siblings, the high number of families with an absent birth parent raises questions about what impact this situation may have for children as a factor interacting in concert with other risk factors to produce a specific abuse pattern. The increased number of birth mothers parenting children alone appeared to result in greater numbers of physical abuse incidents in cases of multiple victims, while the presence of a stepfather or mother's boyfriend increased the possibility of sexual abuse in families with only one victim. How this interaction occurred would pose an useful avenue of inquiry.

The level of stress experienced within a family could receive a more systematic examination through a prospective study of individuals currently experiencing a particular stressor and their ability to handle the demands of parenting. Studies addressing the specific stress associated with parenting could add a useful component to understanding the interaction of these factors. Further, an assessment of the coping mechanisms available intra-personally and inter-personally could provide greater understanding of factors mitigating against child abuse, though family stress is experienced.

While this study focused on families experiencing abuse, much could be gained by studying the reverse outcome in the presence of the risk factors reported in this study. Assessing parents who suffered child abuse during their childhood, but do not abuse their own children could provide beneficial information to mental health practitioners about the focus of services and treatment efforts. Evaluating families with prior substantiated reports of abuse, who successfully remediate and have no further abuse incidents would add immensely to the understanding of child abuse dynamics. Further, this type of research could be both retrospective, i. e., gathering historical information through clinical interviews, and prospective and longitudinal, such as studying families through the course of intervention services and follow-up assessments. Though child abuse can result in the presence of risk factors evaluated in this research, much useful information could be gained by conducting a Case-Control study with an added Control Series for those families not experiencing any abuse incidents.

Implications for the Profession

The research presented in this study found a statistically significant relationship between risk of abuse to siblings and substance abuse and severe addiction by the offender and non-offending caretaker. Statistically significant relationships were also noted between a history of childhood abuse, prior substantiated reports of abuse, and particular categories of stress as expressed in conflict over separation, divorce, and custody issues, and spouse abuse. Mental health professionals involved in the investigation and treatment of child abuse victims and their families must consider strongly the need to ask specific questions during clinical interviews regarding these risk factors. According to Newberger (1991), many clinicians fail to ask direct questions regarding these difficult topics, fearing a defensive reaction or alienation of the client. Though family members may resist and demonstrate discomfort about the clarity of such questioning, treatment planning and assessment of goals attained cannot proceed with potency until the clinician can help family members accept and remediate factors placing them at increased risk of child abuse.

The need exists to implement training programs for mental health professionals conducting abuse-focused therapy to improve knowledge and skills in recognizing and appropriately responding to problems related to these risk factors. Greater knowledge will enhance the professionals ability to evaluate and diagnose areas of potential risk, such as substance abuse and addiction, and spouse abuse as a stressor. Currently, few institutions training mental health professionals in the country offer course-work designed specifically toward the issues of child abuse and abuse-focused therapy. An increased

level of training may reduce the risk of labeling parents as abusive when abuse may have been falsely reported by increasing awareness of the dynamics associated with abuse incidents. Further, educational efforts may permit mental health professionals more precise capability to diagnose and treat families demonstrating child abuse. Such training and education can result in a greater level of confidence demonstrated by the mental health professional in presenting information to the judiciary and working cooperatively with law enforcement professionals.

Early assessment of potential risk factors, such as those identified in this study, will result from increased training and education about the family dynamics associated with child abuse. Mental health professionals have, through research studies, demonstrated difficulty meeting the needs of children and adolescents, and their parents experiencing child abuse (Collins & Collins, 1994). Mental health professionals, through evaluation of specific risk factors, can assist service agencies in developing treatment plans which address risk factors. This assessment and treatment planning process can occur in an atmosphere where risk factors are not used to judge or label parents as potential abusers. Rather, the process can focus on family strengths maintaining a cognizant attitude that the risk factors, as areas of vulnerability, may lead to abuse, but do not necessarily need to reach such a conclusion. Delivering services which remove the risk to the child and support the integrity of the family result from this process. Such an assessment, when grounded in knowledge about specific risk factors, can also aid the family when the strength of risk appears too severe and the safety of a child cannot be assured.

Treatment efforts will follow upon the efficient assessment of family dynamics regarding potential areas of risk. Family treatment and treatment of individuals within the family will discover greater focus when risk factors have received assessment for their level of severity. The mental health professional can attend to reducing their impact and building on strengths within the individuals and family unit.

Early intervention services for families evidencing risk factors though not yet displaying abuse incidents could offer a vital tool to ameliorating child abuse from our society. When risk factors are known and evaluated for the level of severity, families could receive treatment prior to any abuse incident. One simple example would be a parent education program offered to individuals arrested for intoxicated driving practices. Though abuse may not be an issue in their lives, given the results of the current study and other literature, the likelihood of substance abuse and severe addiction of substances having an association with increased risk of abuse to siblings is high. Addressing the issue before abuse occurs could be a challenge capably handled by the profession. Mental health professionals might consider offering stress management programs to parents referred for their first case of child abuse. The ability to cope with stress could reduce the incidence of future episodes. Therapy to heal wounded memories and psychotherapeutic work regarding anger management for clients reporting a history of childhood abuse could reduce the impact of this particular risk factor.

Finally, prevention and community education efforts offered by mental health professionals could assist in reducing the effects of risk factors. Educational programs regarding the psychological and biological effects of the use of addictive substances, and

their relationship to child abuse would serve to increase awareness about this issue. Assisting in programs for victims of spouse abuse and increasing community awareness regarding the relationship between this factor and child abuse could be accomplished by mental health professionals. Mental health professionals can help in prevention by assessing the level of support a family evidencing risk factors has within their extended family and community, and assist them in utilizing those resources to reduce stress and increase the potential for greater success with parenting techniques.

No one group of professionals or disciplines can handle the task of dealing with child abuse in our society. Mental health professionals must respond from a variety of approaches and have familiarity with community services. When risk factors arise beyond the scope of one agency, mental health professionals should know how to access other more appropriate resources. Mental health professionals must recognize the multiple and interactional family dynamics of child abuse, and individualize assessment and treatment plans for specific children and families, focusing on family strengths, while competently assessing areas of vulnerability and risk.

Chapter Summary

Chapter V provided a discussion of results and recommendations from a study of risk factors associated with child abuse in siblings of identified victims. Factors identified as contributing at a statistically significant level of risk were reviewed. Suggestions to strengthen and focus future study regarding risk factors presented in this study were identified. Finally, recommendations were made for comprehensive interventions by

mental health professionals providing services to child abuse victims, their families, and families at risk of future abuse.

APPENDIX A
CODING INSTRUMENT FOR DATA GATHERING

ASSESSMENT OF FAMILY #_____

ALLEGED VICTIM(S) AT TIME OF REFERRAL

	VICTIM (Y or N)	AGE YRS.	MONS.	SEX (M OR F)
01*	_____	___	___	___
02	_____	___	___	___
03	_____	___	___	___
04	_____	___	___	___
05	_____	___	___	___
06	_____	___	___	___
07	_____	___	___	___

*Indicates identified victim

ETHNIC ORIGIN OF CHILD

01___African-American
02___Asian
03___Biracial
04___Hispanic
05___Native American
06___White/Caucasian

CUSTODIAL PARENT(S) AT TIME OF ABUSE

01___Birth Father

02___Birth Mother

03___Parent's paramour, female

04___Parent's paramour, male

05___Stepfather

06___Stepmother

BIRTH PARENT ABSENT

01___Yes

02___No

ALLEGED OFFENDER'S RELATIONSHIP
TO THE CHILD VICTIM(S)

01___Birth Father

02___Birth Mother

03___Parent's paramour, female

04___Parent's paramour, male

05___Stepfather

06___Stepmother

PRIOR REFERRALS TO HRS &/or CPT

01___Yes

02___No

PRIOR REFERRAL INVOLVED

01___Physical Abuse

02___Sexual Abuse

03___Neglect

NUMBER OF PRIOR REFERRALS

01___One

02___Two

03___Three

04___Four or more

CHILD/CHILDREN REMOVED
DUE TO ABUSE OR NEGLECT
PRIOR TO CURRENT REFERRAL

01___Yes

02___No

SUBSTANCE USE
NON-OFFENDING CARETAKER

(Endorse only one item.)

01___No substance abuse by non-offending caretaker

02___Substance abuse by non-offending caretaker--moderate

03___Severe addiction of non-offending caretaker

04___Non-offending caretaker not available in child's home environment

SUBSTANCE USE
OFFENDER

(Endorse only one item.)

01___No substance abuse by offender

02___Substance abuse by offender--moderate

03___Severe addiction of offender

CHILDHOOD HISTORY
NON-OFFENDING CARETAKER

(More than one item may be endorsed.)

01___General childhood experience described as positive and nurturing

02___Unhappy childhood reported; few details

03__Abusive/neglectful childhood reported (This may include emotional, physical, and/or sexual abuse, or a history of observing family violence.)

04___Removed from childhood home as a result of abuse and/or neglect

05___Non-offending caretaker not available in child's home environment

CHILDHOOD HISTORY
OFFENDER

(More than one item may be endorsed.)

01___General childhood experience described as positive and nurturing

02___Unhappy childhood reported; few details

03__Abusive/neglectful childhood reported (This may include emotional, physical, and/or sexual abuse, or a history of observing family violence.)

04___Removed from childhood home as a result of abuse and/or neglect

STRESSFUL LIFE EXPERIENCES

(More than one item may be endorsed.)

01___Presence of economic difficulties

02__Health concerns; chronic disability of one or more family members, or deterioration of health during the past year of at least one family member

03___Death of immediate or extended family member during the past year

04___Birth during the past year within the nuclear family

05___Problem in the relationship with spouse or partner; arguing and conflict

06___Problem in the relationship with spouse or partner; separation, divorce, or custody

07___Problem in the relationship with spouse or partner; spouse abuse and violence

08___Problem in the relationship with extended family members

09___Emotional or psychiatric problems; acute, developing or increasing in severity during the past year

10___Emotional or psychiatric problems; chronic mental health history and diagnosis

ALLEGATION MATRIX

01___Physical abuse allegation

02___Sexual abuse allegation

03___Both physical and sexual abuse

TYPES OF ABUSE

01___Bone fractures

02___Bruises/Welts

03___Burns/Scalds

04___Confinement/Bizarre punishment

05___Cuts/Punctures/Bites

06___Death due to abuse/neglect

07___Emotional maltreatment

08___Family violence threatens child

09___Head injury; Intra-cranial hemorrhage

10___Head injury; Retinal hemorrhage

11___Head injury; Skull fracture

12___Head injury; Subdural hematoma

13___History of physical abuse

14___Inadequate supervision; Caretaker absent

15___Inadequate supervision; Caretaker present

16___Medical neglect

SEXUAL ABUSE:

17___ Cunnilingus

18___ Digital penetration

19___ Exploitation

20___ Exposing child to pornography

21___ Fellatio

22___ Fondling

23___ Penile penetration of the anus

24___ Penile penetration of the vagina

25___ Requiring child to witness sexual acts

26___ Sexual exposure of adult to child

27___ Sexually transmitted disease

28___ Use of object for anal/vaginal penetration

RESPONSE OF NON-OFFENDING CARETAKER TO THE ABUSE

THE CARETAKER GENERALLY:
(More than one response from 03-05 may be endorsed.)

01___Expresses understanding and awareness of the victim's needs. Supportive of the victim.

02___Expresses limited understanding and awareness of the victim's needs. Equivocal or inconsistent reaction.

03___Demonstrates denial of abuse report.

04___Demonstrates support of offender.

05___Demonstrates unwillingness to engage with service agencies.

06___Non-offending caretaker not available in the home environment.

CHARACTERISTICS OF THE ABUSE SITUATION

01___Alleged offender admitted to abuse/neglect

02___Alleged offender denied committing abuse/neglect

03___Abuse substantiated by medical evidence

04___Abuse unsubstantiated by medical evidence

05___Abuse substantiated by clinical assessment

06___Abuse unsubstantiated by clinical assessment

07___Abuse of short duration; equal to or less than 1 month

08___Abuse of long duration; greater than 1 month

09___Abuse incidents occurring 5 or fewer times

10___Abuse incidents occurring more than 5 times

11___Force/Threats used to coerce compliance and/or secrecy

12___Force/Threats not used to coerce compliance and/or secrecy

SERVICES PROVIDED BY CPT

01___Case Coordination

02___Deposition

03___Court Testimony

04___Medical diagnosis and evaluation

05___Psychological evaluation

06___Psychosocial assessment

07___Team staffing

08___Validation of abuse assessment

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BIOGRAPHICAL SKETCH

Charlotte Ann Chadik spent the first 25 years of her life in the suburbs surrounding Cleveland, Ohio, her birth town. She received a Bachelor of Science degree from Kent State University in 1977, with dual majors in elementary and special education.

Ms. Chadik moved from Ohio to Panama City, Florida, in 1977 and held employment with the community mental health center, focusing her work on children and family services, particularly working with abused and neglected children. She spent several years teaching emotionally handicapped elementary-aged children. Ms. Chadik enjoyed part-time employment as a piano teacher for children and adults.

Graduate school attendance began at the University of West Florida in 1982 with an emphasis on school guidance. This educational process continued when Ms. Chadik moved to Gainesville, Florida, in 1984 to attend graduate school at the University of Florida. Ms. Chadik obtained her Master of Education and Educational Specialist degrees from the University of Florida, Department of Counselor Education in 1987 with an emphasis on marriage and family counseling.

While attending graduate school, Ms. Chadik found an assistantship working with the Associate Dean for the College of Education, Dr. M. McMillin. This employment, while professionally rewarding, proved to offer Ms. Chadik the opportunity to meet her husband, Paul Chadik, at the Help Table during Spring Semester registration. Ms.

Chadik married Paul Chadik in 1988 and gained the added joy of step-motherhood to Lisa.

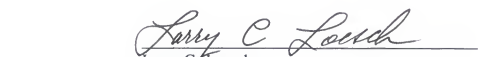
During her work toward the Doctor of Philosophy, Ms. Chadik has taught courses in psychology and personal development at Santa Fe Community College, where she also offered counseling and advisement services. Ms. Chadik began work with the Child Protection Team at the University of Florida in 1987, where she remained until 1991. She offered psychotherapy in a private practice for several years part-time and then on a full-time basis. Missing the team aspect of the work environment, Ms. Chadik returned to the Child Protection Team in 1993, where she is currently employed. She continues to see clients for psychotherapy in her private practice.

Following her graduation, Ms. Chadik will continue her goal to work with child abuse victims and their families, offering counseling services, community and professional training, and child advocacy.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

W. M. Parker, Chairman
Professor of Counselor Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



Larry C. Loesch
Professor of Counselor Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

James H. Pitts
Associate Professor of Counselor Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

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Professor of Sociology

This dissertation was submitted to the Graduate Faculty of the College of Education and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

May 1996

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